

# Conditions and Analyses

## Appendix

### Overview

In preparing this Plan of Conservation and Development for the Town of East Windsor, the Planning and Zoning Commission reviewed and analyzed demographic and fiscal data and current conditions pertaining to conservation issues, economic and residential development, and infrastructure.

Summaries of these analyses are provided in this Appendix for ready referral by reviewers of this Plan of Conservation and Development. These summaries are

- Conditions and Trends: History, Demographics, Economics, and Fiscal Conditions
- Conservation Issues: Land, Water, Open Space, Environment, Cultural
- Development Issues: Residential, Village, and Business
- Infrastructure Issues: Municipal, Utility, Structural

*“If we could first know where we are, and whither we are tending, we could better judge what to do, and how to do it.”*

Abraham Lincoln

East Windsor Academy



Broad Brook Opera House



Broad Brook Mill



East Windsor Plaque

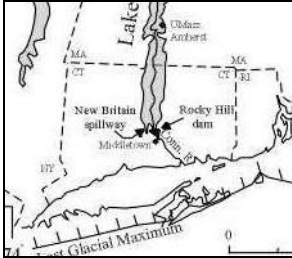


## Conditions and Trends

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### History of East Windsor

#### Glacial Lake Hitchcock



East Windsor's landscape is primarily the result of glacial processes occurring approximately 15,000 to 18,000 years ago. As the glacial wall retreated northward, deposits created a huge dam across what is now the Connecticut River Valley, a rift valley created by tectonic forces 65 to 225 million years ago. What is today called Lake Hitchcock formed behind the dam, covering most of the land that makes up East Windsor.

When the dam ultimately failed, the fine silts and clays deposited over thousands of years were exposed. Receding water carved terrace escarpments across the former lake bottom, many of which remain evident today. More significantly, this process left behind the flat, fertile, and relatively stone free soils that attracted early settlers.

Native Americans may have settled in this area about 10,000 years ago. By the early 1600s, human settlements in this area had organized into several Native American tribes (Tunxis, Poquonocks, and Podunks). These tribes subsisted primarily as hunters and gatherers although there is evidence they also fished and did rudimentary agriculture.

Early European exploration, notably by Dutchman Adriaen Block, attracted additional exploration and the opening of trade with the Native American tribes along the shoreline and inland along the "great tidal river." Settlers were attracted from the Massachusetts Bay Colony and in 1633 the Town of Windsor was settled. Windsor eventually divided into at least 20 towns including, in 1768, the Town of East Windsor.

### Broad Brook 1905



MAIN STREET in Broad Brook looking north in 1905, Opera House on right. —[Photo loaned by James L. Hall]

From a census population of 2,600 in 1790, East Windsor grew to 3,600 by 1849. East Windsor was primarily an agricultural community through the Colonial period and well into the 19<sup>th</sup> century. Farming and population declined before the Civil War as residents left for better farming opportunities elsewhere, and the town's population declined between 1840 and 1860.

The railroad arrived in the 1860, followed by trolleys around the turn of the century. Both were important means of public transportation until the advent of the automobile. By 1929, buses replaced trolleys as the main form of public transportation.

From the end of the Civil War through 1940, the population stabilized between 3,000 and 4,000 persons, supported by continued agriculture and small industries, most notably the Broad Brook Woolen Mill, which employed several hundred people until its closure in 1953.

The post-World War II spread of people into suburbs and the post-war baby boom hit East Windsor along with many Connecticut towns, and the effects are still seen today. Along with the population came new economic forces, leading to the diverse and growing industrial and commercial activity seen in East Windsor today.

Over the past 100 years, five distinct village centers within East Windsor have arisen and assumed considerable importance to the community. Maintaining and enhancing the intrinsic character of East Windsor will require careful planning attention to these village centers.

Although industrial and commercial development dominate the economic picture of East Windsor today, its landscape and soils still influence land use in the town. Sand and gravel is mined for use in development. Agriculture remains an important business activity, both economically and culturally. Nursery growers take advantage of the fertile, flat soils. Commercial and private horse farms are numerous and shade grown tobacco is still an important crop grown in East Windsor.

More recent developments that have significant planning implications are the establishment of industrial districts and regional commerce centers. The Town has encouraged such development through the creation of industrial parks and the development of sanitary sewers in certain areas.

East Windsor's economy has evolved and adapted to trends that have affected all of Connecticut over the years. Most recently, the Town's favorable location relative to transportation, commuting, and other commercial and industrial centers is driving its economic development and is a major factor in planning for the Town's economic future. At the same time, as will be discussed, this favorable location, combined with the quality of life and intrinsic character of the Town, is attracting new residential development, another key planning factor.

Text and Tables

#### **East Windsor Villages**

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Broadbrook

Warehouse Point

Melrose

Windsorville

Scantic



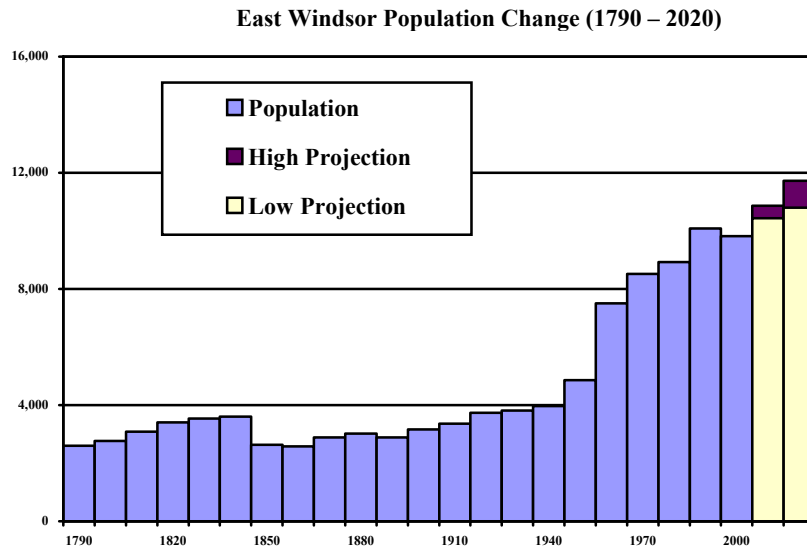
Year	Population	
1900	3,158	
1910	3,362	
1920	3,741	
1930	3,815	
1940	3,967	
1950	4,859	
1960	7,500	
1970	8,513	
1980	8,925	
1990	10,081	
2000	9,818	
2010	10,440	10,870
2020	10,800	11,720

1900 – 2000 Census, Projections in italics.  
Low projections from the CT Office of  
Policy & Management. High projections  
based on continued 1960-2000 growth.

## Demographics

According to the U.S. Census Bureau, East Windsor had a population of 9,818 people in the year 2000, a decline of 263 people from the 1990 Census. The population of Connecticut grew by 3.6 percent during this same period. However, the population decline reported for East Windsor may reflect a temporary high rate of vacancy in a major housing development due to renovations that were underway there during the census period. Therefore, the high growth projection shown in the sidebar and the chart below has been adjusted to account for this presumed temporary decline.

After the dramatic post war population increase of the 1950s (54%), East Windsor has shown steady growth averaging approximately 7 percent per decade from 1960 to 2000. This compares to statewide population growth of about 8 percent per decade over the same period.



The chart and the sidebar on the facing page illustrate population growth in East Windsor and provide low and high projections for the first two decades of the 21<sup>st</sup> century. The low projection is from the 1995 Connecticut Office of Policy and Management analysis, which is widely regarded as outdated. To address the presumed Census 2000 undercount of temporary multifamily vacancies, a high population projection was calculated by assuming zero percent growth from 1990 to 2000 (rather than the nearly 3 percent decline reported by the Census). A calculated average growth rate of 8 percent per decade, based on actual 1970 to adjusted 2000 growth rates, was applied to derive the high projections.

These population projections provide a reasonable range for the Town to consider in the preparation of its Plan of Conservation and Development.

## Age Composition

For planning purposes, changes in age composition may be just as significant as growth rates. Population projections can help assess the potential implications of demographic changes on municipal services and housing types.

The projections of future age compositions prepared by the Connecticut Census Data Center in 1995, tabulated below, are regarded as outdated and do not reflect the latest Census information. Therefore these projections should be considered only as indicators of general trends.

For planning purposes, the age composition of a community can be evaluated for consideration of needs or concerns for different age groups

- children (ages 0-19),
- adults (ages 20-54), and
- mature residents (ages 55 and up).

As shown in the sidebar table, East Windsor's age composition closely tracks that of the State as a whole.

In addition, each of these groups can be further broken down into two or more sub-groups for specific purposes based on the data listed in the following table. Note that the projections by age category are based on the 1995 State calculations and are therefore not consistent with the high projections prepared for this report.

2000 Age Composition		
	East Windsor	State
<b>0 - 19</b>	24%	27%
<b>20 - 34</b>	18%	19%
<b>35 - 54</b>	33%	31%
<b>55 - 64</b>	10%	9%
<b>65 +</b>	15%	14%

Source 2000 Census

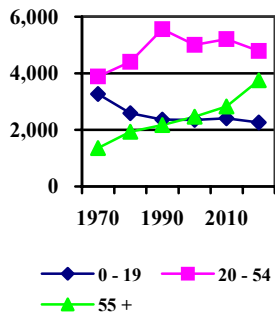
**East Windsor Age Composition (1970 to 2020)**

Ages	Actual				Projections	
	1970	1980	1990	2000	2010	2020
<b>0-4</b>	668	510	733	559	564	634
<b>5-19</b>	2,599	2,078	1,627	1,790	1,842	1,622
<b>20-34</b>	1,782	2,405	3,040	1,796	1,809	2,119
<b>35-54</b>	2,106	2,003	2,514	3,211	3,398	2,672
<b>55-64</b>	759	951	920	1,018	1,265	1,888
<b>65 +</b>	599	978	1,247	1,444	1,562	1,864
<b>Total</b>	<b>8513</b>	<b>8,925</b>	<b>10,081</b>	<b>9,818</b>	<b>10,440</b>	<b>10,800</b>

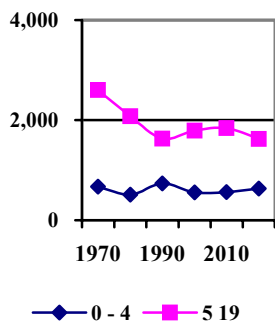
1970 - 2000 Census, Projections by Connecticut Census Data Center (1995)



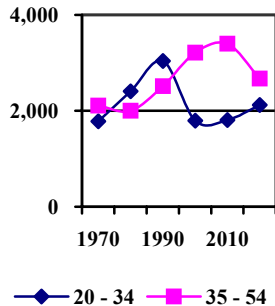
**All Age Groups**



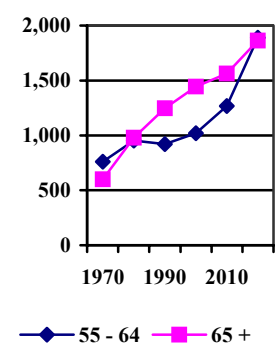
**Children (Ages 0 - 19)**



**Adults (Ages 20 - 54)**



**Mature Adults (55+)**



## Demographic Trends

Based on this data and expected population trends in East Windsor, we can anticipate the following changes in the community over the next 20 years.

Description	Age Range	Needs	Projection To 2020
<b>Infants</b>	0 to 4	<ul style="list-style-type: none"> <li>Child Care</li> </ul>	<b>Slight increase by 2020</b>
<b>School Age</b>	5 to 19	<ul style="list-style-type: none"> <li>School facilities</li> <li>Recreation facilities</li> <li>Recreation programs</li> </ul>	<b>Lower by 2020</b>
<b>Young Adults</b>	20 to 34	<ul style="list-style-type: none"> <li>Rental housing</li> <li>Starter homes</li> <li>Social destinations</li> </ul>	<b>Higher by 2020</b>
<b>Middle Age</b>	35 to 54	<ul style="list-style-type: none"> <li>Family programs</li> <li>Trade-up homes</li> </ul>	<b>Lower by 2020</b>
<b>Mature Adults</b>	55 to 65	<ul style="list-style-type: none"> <li>Smaller homes</li> <li>Second homes</li> </ul>	<b>Much higher by 2020</b>
<b>Retirement Age</b>	65 and over	<ul style="list-style-type: none"> <li>Tax relief</li> <li>Housing options</li> <li>Elderly programs</li> </ul>	<b>Much higher by 2020</b>

Several demographic changes are anticipated in East Windsor over the next twenty years. As can be seen from the first chart in the sidebar, East Windsor is expected to see significant growth in the number of mature adults (ages 55 and over) and slow growth in the younger age groups. While it may seem that all new growth is expected to be older residents, it is primarily caused by the aging of existing residents.

By 2020, mature adults will comprise over one third of the total population of East Windsor. The expansion of municipal services such as social and housing programs may be necessary to support this growing population.

## Housing

According to the U.S. Census Bureau, East Windsor had 4,078 housing units in 2000, an increase of 178 units, or nearly five percent, from 1990. This increase also supports the assumption discussed above regarding the likely Census undercount in 2000.

Over 60 percent of the housing stock of East Windsor is single-family residential units. With nearly 40 percent of housing stock as multi-family, East Windsor has a very diverse housing stock, which contributes to the availability of affordable housing, as defined by Connecticut General Statutes. Over 15% of East Windsor housing qualifies as affordable, compared to under 11% statewide.

For planning considerations, this exempts the Town from the appeal provisions of Connecticut General Statutes Section 8-30g, which may override local land-use decisions.

## Development Trends

Development trends are illustrated in the following table, prepared by the East Windsor Planning and Zoning Department. While this data shows year to year fluctuations, the trend over the past two decades had been relatively stable for new single family residential units, which may be considered the most important development category for most planning purposes.

**East Windsor New Construction Trends**

Years	Single Family	Units/ Year	Multi Family	Units/ Year	Mobile Homes	Units/ Year	Commercial Industrial	Units/ Year
1980-84	65	<b>13</b>	119	<b>23.8</b>	17	<b>3.4</b>	57	<b>11.4</b>
1985-89	149	<b>29.8</b>	511	<b>102.2</b>	16	<b>3.2</b>	74	<b>14.8</b>
1990-94	50	<b>17.4</b>	48	<b>9.6</b>	8	<b>1.6</b>	27	<b>5.4</b>
1995-99	134	<b>26.8</b>	35	<b>7</b>	31	<b>6.2</b>	30	<b>6</b>
2000	56	-	5	-	12	-	9	-
1980-89	214	<b>21.4</b>	630	<b>63</b>	33	<b>3.3</b>	131	<b>13.1</b>
1990-99	221	<b>22.1</b>	83	<b>8.3</b>	39	<b>3.9</b>	57	<b>5.7</b>
1980-2000	491	<b>23.3</b>	718	<b>34.2</b>	83	<b>3.9</b>	197	<b>9.4</b>

Source: Town of East Windsor

## Housing Growth

<b>1960</b>	2,081
<b>1970</b>	2,590
<b>1980</b>	3,140
<b>1990</b>	3,900
<b>2000</b>	4,078

1960-90 Censuses. CT - DECD

## Median Housing Price 1999

Windsor	\$139,000
So. Windsor	\$138,495
Bloomfield	\$125,000
Enfield Milford	\$117,500
Windsor Locks	\$106,950
<b>East Windsor</b>	<b>\$96,925</b>
<b>Connecticut</b>	<b>\$149,000</b>

CT Economic Policy Council 1999

## 'Affordable Housing'

<b>East Windsor</b>	15.4%
<b>State</b>	10.7%

Source: CT Department of Economic & Community Development

Affordable housing is defined by Connecticut General Statutes as either financially assisted housing or set-aside housing for persons meeting specific income definitions.

### Where East Windsor

#### Residents Commuted To:

	% resident labor force
<b>East Windsor</b>	<b>15%</b>
Enfield	14%
Hartford	13%
Windsor Locks	13%
Windsor	9%
East Hartford	7%
South Windsor	6%

T Policy & Economic Council 1999-2000

### Where East Windsor

#### Residents Commuted

#### From:

	% resident labor force
<b>East Windsor</b>	<b>18%</b>
Enfield	18%
Massachusetts	12%
Windsor Locks	4%
Hartford	3%
Windsor	3%
South Windsor	3%

T Policy & Economic Council 1999-2000

## Economy

East Windsor is both a residential suburb for persons working in many other area towns and an employment center for many residents of East Windsor and surrounding towns. The Tables below demonstrate the employment relationships of East Windsor and area towns, which data is important for understanding many planning issues such as housing demand, transportation patterns, economic development potential, and municipal services.

## Jobs and Housing

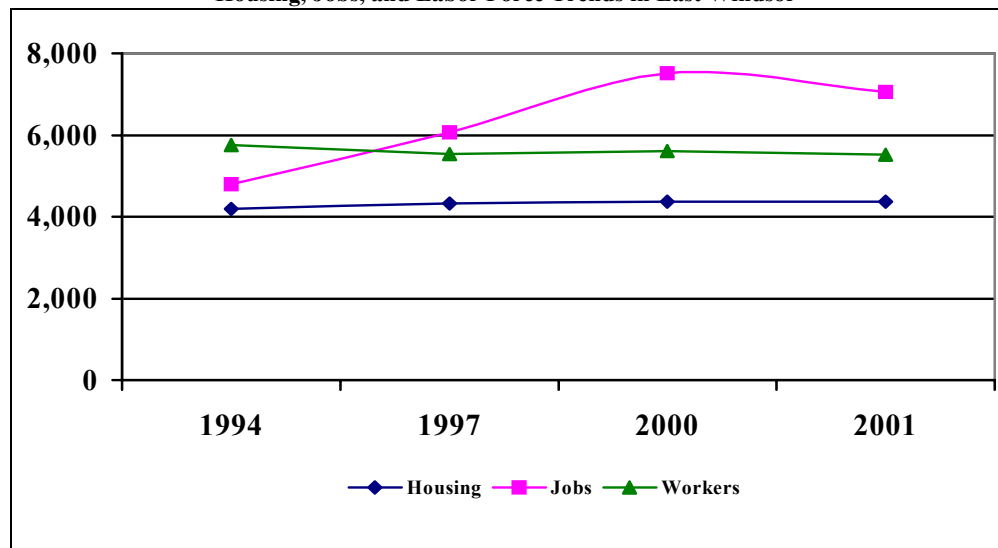
East Windsor business and industry provide more jobs than the community has people in the workforce. While the ratio is not as great as in the urban centers nearby, it does exceed the many outlying communities that are more residential.

East Windsor Jobs and Housing Data

Town	Number of Jobs	Number of Housing Units	Jobs/Housing Ratio*	Number of Workers	Jobs/Worker Ratio
Windsor Locks	14,580	5,049	309%	6,596	236%
Bloomfield	18,350	8,144	225%	9,845	186%
Hartford	122,200	54,540	224%	52,423	233%
East Granby	3,810	1,902	200%	2,429	157%
Windsor	18,660	10,790	173%	14,341	130%
<b>East Windsor</b>	<b>7,060</b>	<b>4,366</b>	<b>162%</b>	<b>5,517</b>	<b>128%</b>
South Windsor	11,400	9,020	126%	13,229	86%
County	<b>489,010</b>	<b>353,022</b>	<b>139%</b>	<b>418,970</b>	<b>117%</b>
<b>Connecticut</b>	<b>1,682,800</b>	<b>1,385,975</b>	<b>121%</b>	<b>1,717,653</b>	<b>97%</b>

\*Approximate, housing data from 1999, employment and jobs data from 2001  
Nov. 2003 DECD Connecticut Town Profiles

Housing, Jobs, and Labor Force Trends in East Windsor



As the chart above indicates, East Windsor has grown in importance as a regional source of employment, even as the number of workers living in the Town and the housing supply have remained relatively stable.



## Economic Trends

As may be seen from the data presented above, East Windsor has experienced strong economic growth over the past ten to twenty years or so. Local employment in East Windsor grew by 2400 jobs (non-farm employment) between 1990 and 2000. This clearly reflects the significant development experienced in East Windsor over the past decade.

The following table documents the dramatic growth in employment in East Windsor over the last 40 years.

**East Windsor Non-Agricultural Employment by Major Category**

	1963	1970	1980	1990	2000
<b>Goods Producing Industries</b>	<b>939</b>	<b>383</b>	<b>1,110</b>	<b>790</b>	<b>1,650</b>
Construction	49	67	140	280	340
Manufacturing	896	316	970	510	1,310
<b>Trade Industries</b>	<b>300</b>	<b>548</b>	<b>1,660</b>	<b>2,550</b>	<b>2,460</b>
Wholesale	42	56	660	1,080	1,140
Retail	258	492	1,000	1,470	1,320
<b>Services Producing Industries</b>	<b>270</b>	<b>600</b>	<b>940</b>	<b>1,490</b>	<b>3,400</b>
Transportation & Utilities	n/r	n/r	n/r	n/r	640
Finance, Insurance, & R.E.	20	39	0	150	110
Services (incl. Non-profit)	126	216	520	930	2,130
Government	124	345	420	410	520
<b>Total Non-Agric. Employment</b>	<b>1,509</b>	<b>1,531</b>	<b>4,060</b>	<b>5,110</b>	<b>7,510</b>

CT Department of Labor; n/r: not reported

Appropriate guidance for future economic development is a key issue to be considered throughout the planning process and is the subject of an economic development evaluation undertaken by Garnet Consulting Services for inclusion in this Plan.



## Definitions

**Developed Land** - land that has buildings, structures, or improvements used for a particular economic or social purpose (such as residential or institutional)

**Committed Land** - land that is used for a particular economic or social purpose (including developed land and dedicated open space)

**Vacant Land** - land that is not developed or committed

**Dedicated Open Space** - land or development rights owned by the Federal government, the State, the Town, land trusts, or conservation organizations intended to remain for open space purposes.

**Managed Open Space** - land owned by fish and game clubs, cemeteries, recreational clubs, and other organizations which is used for other purposes but provides open space benefits.

## Land Use

Land uses in East Windsor, as typically characterized, are shown on the map on the facing page. East Windsor contains approximately 17,150 acres. Of this area, approximately 362 acres (2% of the town) is covered by water.

The land use survey estimates that nearly 6,200 acres or about 36% of the town area is either developed for residential, business, or industrial purposes, or committed to a specific use such as open space or municipal use.

Dedicated open space occupies 5 % of all land within the town. Another 24 % of the Town is temporarily constrained from development by easements or through the tax abatement program know as Public Act 490 assessment. This land is not considered permanently protected and could potentially be converted for development purposes in the future.

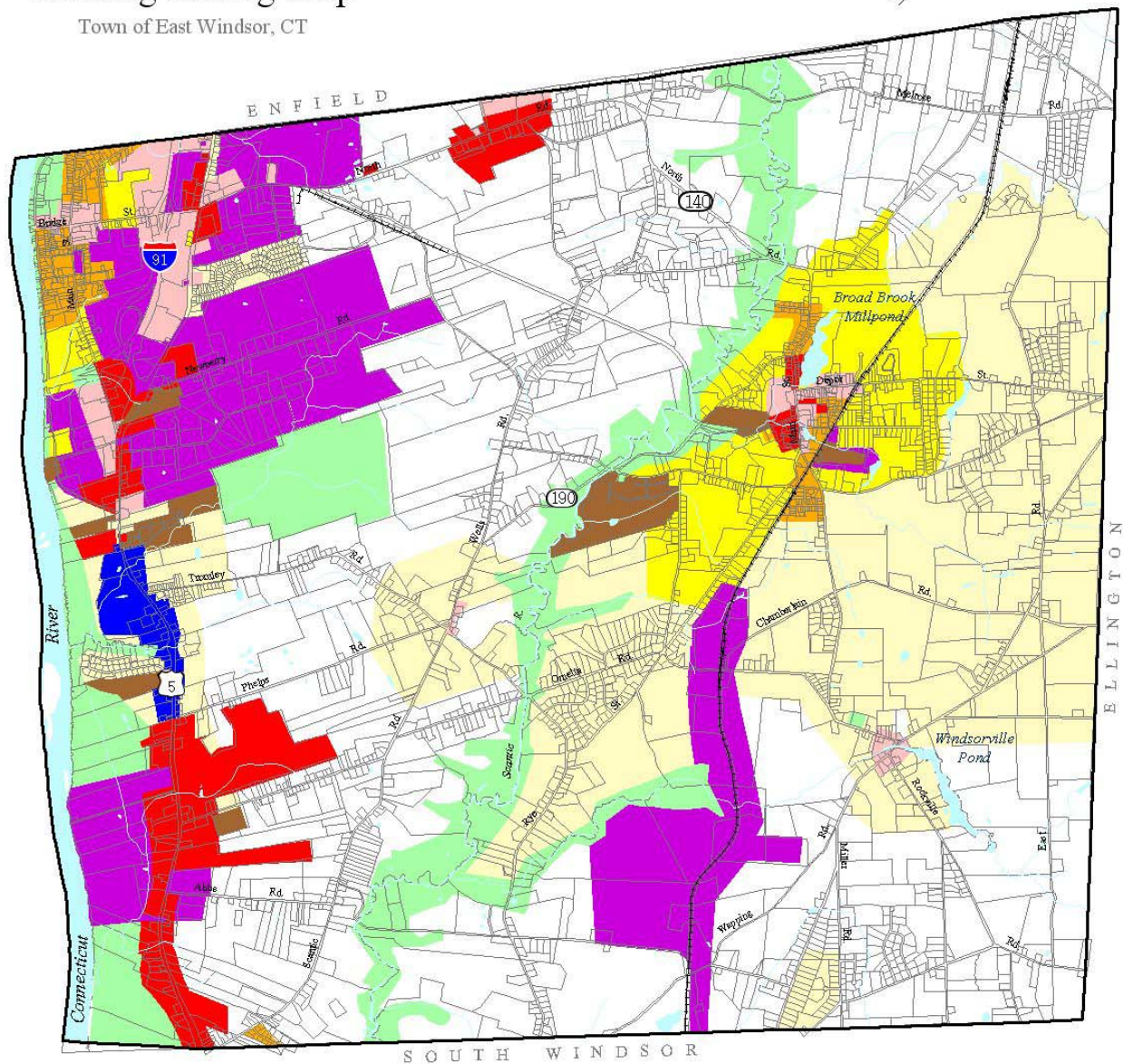
The table below details the land use breakdown in East Windsor. The map on the facing page shows the current zoning districts.

	Residential Districts	Commercial Districts	Industrial Districts	Unidentified	Total	%of total
Agriculture	3875	87	417	17	4396	0.26
Airport	48				48	0.00
CF	149	41			190	0.01
Commercial	137	240	144	1	522	0.03
DOS	850	17	32	3	902	0.05
Farm Icon	2688	45	32	10	2775	0.16
Residential Icon	1045	12	48	4	1109	0.06
Industrial	73	227	558	3	861	0.05
Institutional	28	13	13		54	0.00
MFD	348	69	17		434	0.03
MOS	257	8	16		281	0.02
ROW	534	110	109	3	756	0.04
SFD	1858	133	38	9	2038	0.12
Utility		3	1		4	0.00
Vacant	1842	101	460	20	2423	0.14
Water	44	1	7	310	362	0.02
Total	13776	1107	1892	380	17155	

Land use information from East Windsor with field updates by Planimetrics. Results may be affected by rounding.

# Existing Zoning Map

Town of East Windsor, CT



## Zoning Districts

- |                     |                              |
|---------------------|------------------------------|
| Residential 1       | Agricultural 1               |
| Residential 2       | Agricultural 2               |
| Residential 3       | Special Development District |
| Business 1          | Transitional Zone            |
| Business 2          | Water and Watercourses       |
| Industrial District |                              |

0 3000 Feet

### Per Capita Education Expenditures

<b>East Windsor</b>	<b>\$1,181</b>
Somers	\$1,225
Windsor Locks	\$1,471
Suffield	\$1,294
Granby	\$1,583
Woodbury	\$1,348
<b>State</b>	<b>\$1,385</b>

CT Policy & Economic Council 1999-2000

### Per Capita Property Taxes

So. Windsor	\$1,922
Granby	\$1,797
Woodbury	\$1,729
Windsor Locks	\$1,606
<b>State</b>	<b>\$1,612</b>
<b>East Windsor</b>	<b>\$1,524</b>
Suffield	\$1,393
Somers	\$1,036

CT Policy & Economic Council 2000-2001

### Equalized Grand List

Equalized grand lists are the estimated full market value of all taxable property in a municipality and are developed by the Connecticut Office of Policy and Management from sales/assessment ratio information. Actual sales are compared to assessed values. For example, a home that sells for \$140,000 and has a sales assessed value of \$70,000 has a sales/assessment ratio of 50%.

### Fiscal Overview of East Windsor

East Windsor spends less than the State average on total expenditures per capita although per capita spending, overall, is in line with towns of similar size, as illustrated in the following table.

1999-2000 Per Capita Expenditure Comparison			
	2000 Population	Expenditures Millions	Per Capita
East Granby	4,745	\$11.33	\$2,387
Windsor Locks	12,043	\$28.08	\$2,331
<b>State</b>	<b>3,405,565</b>	<b>\$7,613.6</b>	<b>\$2,235</b>
Granby	10,347	\$22.85	\$2,208
Suffield	13,552	\$29.27	\$2,159
<b>East Windsor</b>	<b>9818</b>	<b>\$20.73</b>	<b>\$2,111</b>
Woodbury	9198	\$17.29	\$1,879
Somers	10,417	\$18.80	\$1,804

Connecticut Policy & Economic Council

Education accounted for 54 percent of East Windsor's budgeted expenditures of approximately \$21.3 million in fiscal year 2000-2001. This is below the statewide average of 57 percent and ranks East Windsor 143<sup>rd</sup> (of 169 towns) in the State. The Town spent \$204 less per capita on education expenses than the State average.

East Windsor ranks 101<sup>st</sup> in the state in number of students enrolled in schools and 147<sup>th</sup> in per pupil expenditures spent on education. It ranks 155<sup>th</sup> in the state in per capita expenditures on education.

East Windsor generates slightly over 70% of its revenues from property taxes. The Town receives less state aid on a per capita basis than the State average, but more than most surrounding towns.

2000-2001 Per Capita Revenue				
	East Windsor		Connecticut	
Current Taxes	\$1,525	70%	\$1,612	66%
State Aid	\$536	25%	\$627	26%
Surplus	\$51	1%	\$39	2%
Other	\$91	4%	\$166	6%

Connecticut Policy & Economic Council



## Tax Base

East Windsor's Equalized Net Grand List (the total estimated market value of all taxable property in town) in 1999 was \$867 million. About 41% percent of the net Grand List comes from business property while the state average was 26%. In 1998, East Windsor ranked 13<sup>th</sup> in the State for the amount of business property as a percentage of the Grand List. East Windsor's per capita property tax is well below the State average and ranks 94<sup>th</sup> among the State's 169 towns.

East Windsor Fiscal Indicators	
Category	Statewide Ranking
Business Property % of Grand List	13
Equalized Mill Rate	95
Equalized Grand List	94
Per Capita Property Tax	94
Per Capita Education Expenditures	155
Population	96

Source: *Connecticut Municipal Profiles 2000-2001* Connecticut Policy and Economic Council

## 1999 Tax Base Composition

	Percent Business
Windsor Locks	47.3%
<b>East Windsor</b>	<b>41.4%</b>
Windsor	36.3%
East Granby	32.3%
Enfield	30.8%
<b>State</b>	<b>26.0%</b>
S. Windsor	22.5%
CT Policy & Economic Council	

## 1999 Per Capita Grand List

East Granby	\$114,669
Windsor Locks	\$111,153
<b>State</b>	<b>\$96,546</b>
S. Windsor	\$95,124
Windsor	\$88,135
<b>East Windsor</b>	<b>\$86,567</b>
Enfield	\$64,566
CT Policy & Economic Council	

East Windsor Park



Public Works



Residential Subdivisions



## Conservation

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### Overview

At a public meeting held at the beginning of the planning process, attendees identified open space, natural resources, community character, and historic resources as four of the top five priorities to be addressed. Experience has shown that community character and quality of life are strongly influenced by the condition of the land and water, environmental quality, and historic, cultural and scenic assets.

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#### Conservation Issues Outline

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Land Resources:	Soil types and capabilities, topography, vegetative cover
Water Resources:	Rivers and streams, wetlands, bogs, and ponds, floodplain, aquifers
Open Space Resources:	Agricultural land, open space assets, conservation organizations
Environmental Issues:	Water quality, contamination sites, impervious surfaces
Cultural Resources:	Historic structures; roads, vistas and scenery; activities and land uses

### Soil types and capabilities

East Windsor was once the bottom of a huge glacial lake, which explains the high quality and drainage characteristics of the soils. More than 70 percent of the Town's land area, or 12, 250 acres, is composed of soils considered suitable for agriculture, and of that 7,690 acres are classified as prime or significant agricultural soils.

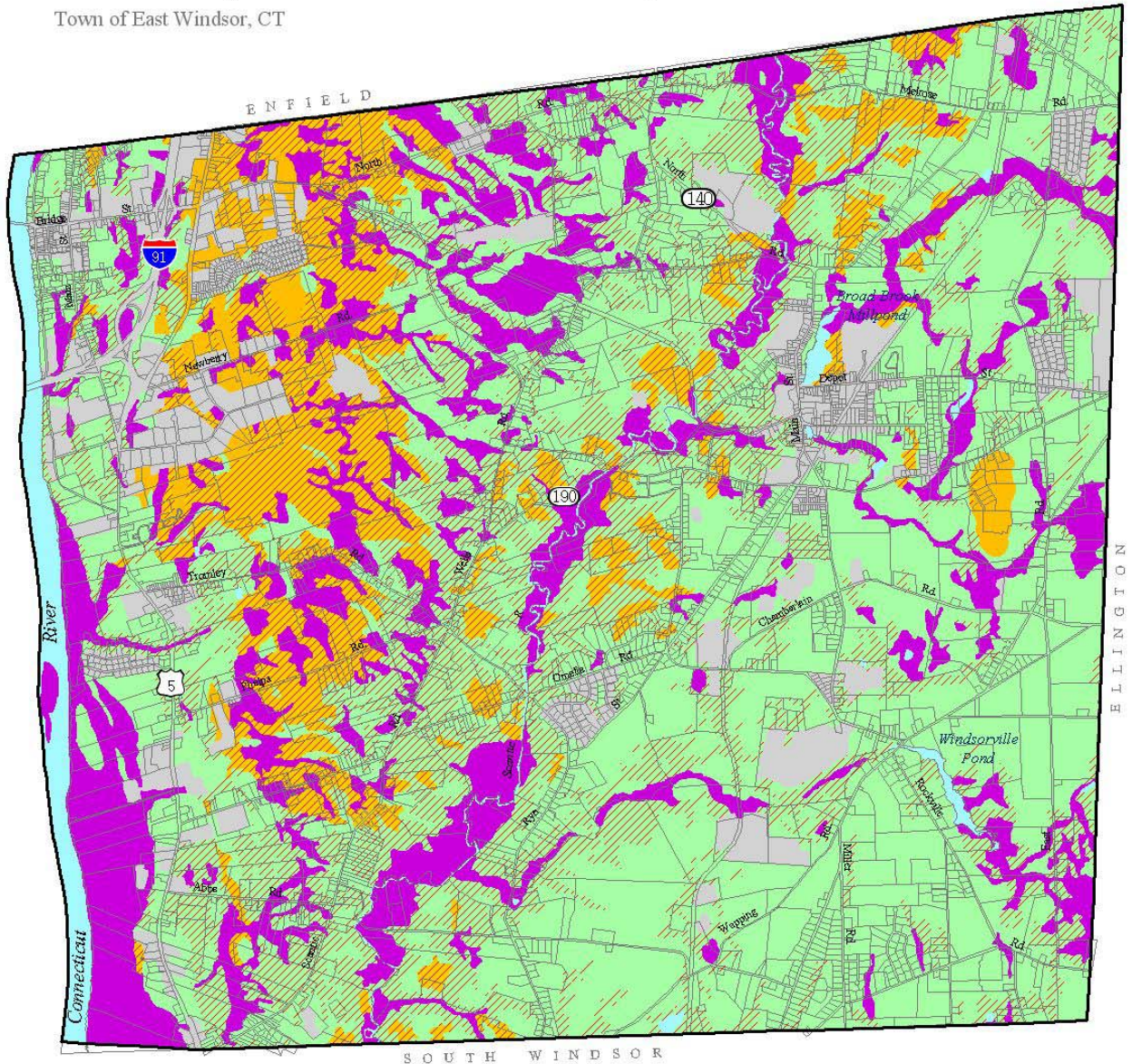
The map on the facing page illustrates the primary soils groups in East Windsor and the table below shows the approximate acreage and percentage of the Town land area for each. Notable is the amount of well-drained soil in East Windsor. Even with constraints, well-drained soils are generally the most suitable for residential development.

East Windsor Soils		
Soil Group	Acres	Percent of Land Area
Well Drained	6,651	39
Well Drained, with constraints	3,584	21
Hardpan, Shallow/Rocky	1,950	11
Variable	1,588	9
Wetland	2,905	17
Water	429	3
<b>Total</b>	<b>17,107</b>	<b>100</b>
<b>Total Well Drained</b>	<b>10,235</b>	<b>60</b>



# Soil Groups

Town of East Windsor, CT



## Legend

- Well Drained
- Well Drained with High Water Table or Slopes >15%
- Hardpan, Shallow/Rocky
- Hardpan, Shallow/Rocky with High Water Table or Slopes >15%
- Other Land
- Poorly Drained
- Water and Watercourses



**Planimetrics**

3000 Highway 100, Suite 100, East Windsor, CT 06021 (860) 351-1000

0 2000 4000 Feet



## Topography and Land Cover

Ground elevations do not vary much in East Windsor, ranging from 33 feet above mean sea level (AMSL) near the Connecticut River to a high point of 320 feet AMSL in the southeast corner of Town. The relatively flat terrain is, again, a result of geological history that contributes to the land's value for agricultural use and its attractiveness for development.

Land cover – forest, crops and grass, and developed land - is shown on the map on the facing page. A more or less contiguous forest cover extends north to south down the middle of the Town. The predominant forest is of typical mixed deciduous hardwoods with areas of evergreen woods. The majority of the forest cover is relatively young, reflecting the extensive agricultural uses that continue today. However, the ecological value of the forest was highlighted by recent documentation of the occurrence of the fisher, a predatory mammal in the weasel family that was once virtually extirpated from the State.

Grass and field crops (corn and tobacco) make up most of the rest of the vegetative cover. Residential development, although it usually results in vegetative cover on most of the developed land, can fragment, or break up, the dominant land cover in an area, with ecological and conservation implications.

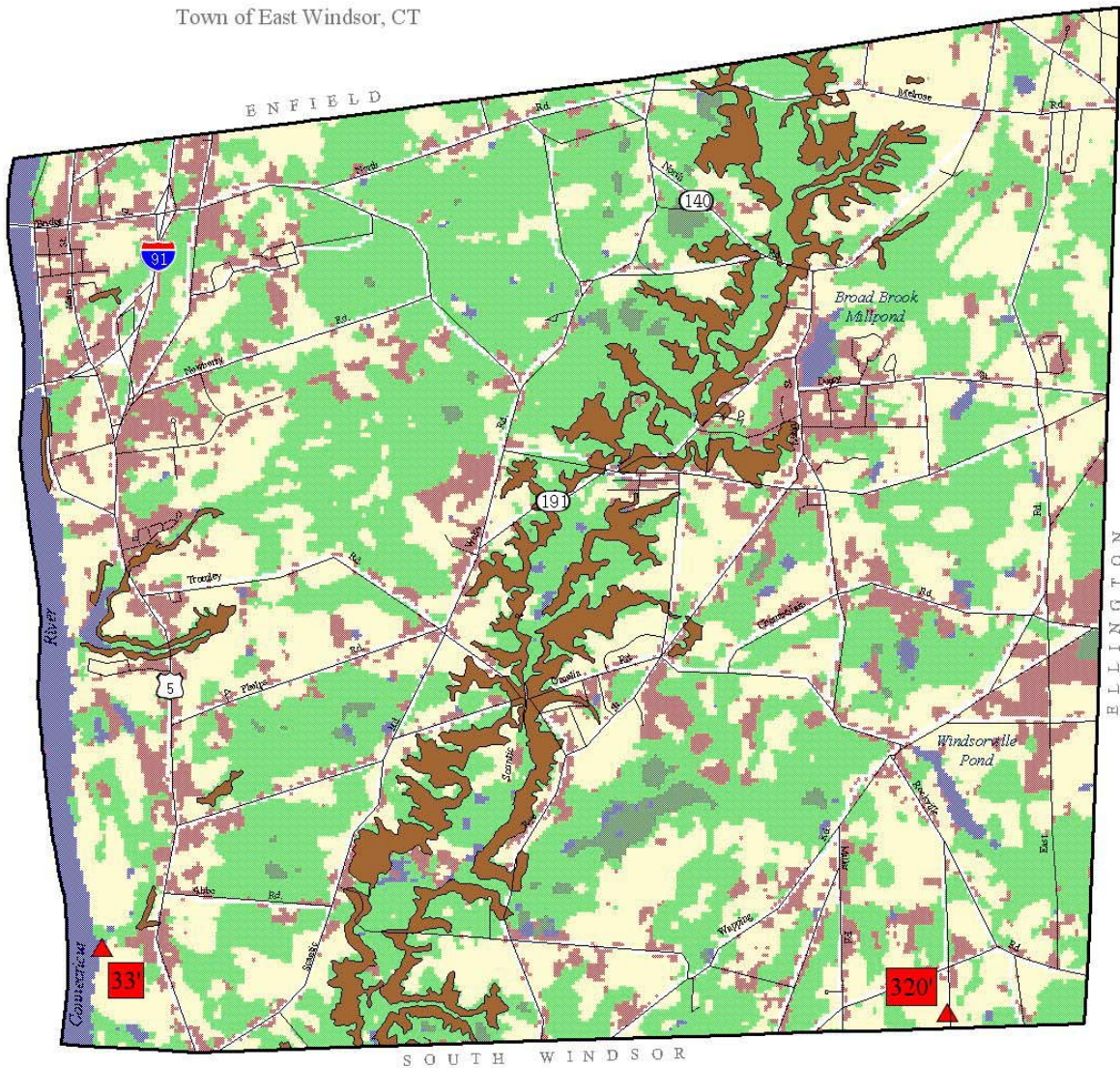
**Fields**





# Land Cover Characteristics

Town of East Windsor, CT



## Legend

▲ Elevations

3000 0 3000 Feet



**Planimetrics**  
51 Frazee Drive, Avon, CT 06001  
860-677-5457

- Terrace Escarpments
- Forest - Coniferous
- Forest - Deciduous
- Wetland - Forested
- Water - Deep
- Water - Shallow
- Residential - Medium Density
- Res + Com - High Density
- Surface - Impervious
- Surface - Roof

- Soil - Bare
- Soil / Corn
- Soil / Grass / Hay
- Soil / Tobacco
- Turf / Grass
- Wetland - Nonforested
- Grass / Corn
- Grass / Hay / Pasture
- Grass / Tobacco
- Land - Barren

## **Water Resources**

Wetlands, watercourses, floodplains, and aquifers are environmentally sensitive resources and important conservation targets in East Windsor. These resources are shown on the maps on pages 2-15, A-15, and A-18 and are discussed below.

Rivers: Approximately 4.6 miles of the Connecticut River abut East Windsor, and virtually the entire reach is classified as wetlands or floodplain. Public access to the River from East Windsor is limited however, with the small Volunteer Park being the only Town recreational facility on the Connecticut River.

The Scantic River bisects the Town and constitutes its most important natural asset. The River and its tributaries, Broad Brook and Ketch Brook, are productive and popular fishing streams and the Scantic River has been noted as an important spawning habitat for alewives and American shad. It is also a major stopover area for migratory black ducks and provides important habitat for nesting wood ducks.

The Scantic River watershed involves an area of some 90,000 acres, extending across Hampden, Mass., and the Connecticut towns of West Stafford, Somers, Enfield, South Windsor, and East Windsor. Although it is only 17 miles from its origin to the Connecticut River in South Windsor, the Scantic meanders for over 38 miles before it reaches the main stem of the Connecticut River.

Wetlands: Wetlands are extensive throughout East Windsor, as shown on the Water Resources map on the facing page. The map also shows the two largest waterbodies, Windsorville Pond and Broad Brook Millpond. A Town Park is on Broad Brook Millpond but there is no public access to Windsorville Pond.

Two rare black spruce bogs are found in East Windsor, relicts of the glacial age. Wapping Bog is about 4 acres and a larger unnamed bog is also known from the southeast section of Town. Of the fewer than 50 bogs in the state, 27 contain black spruce, and the bogs are the only places these trees grow in Connecticut. Bogs support several unique species of plants and insects.

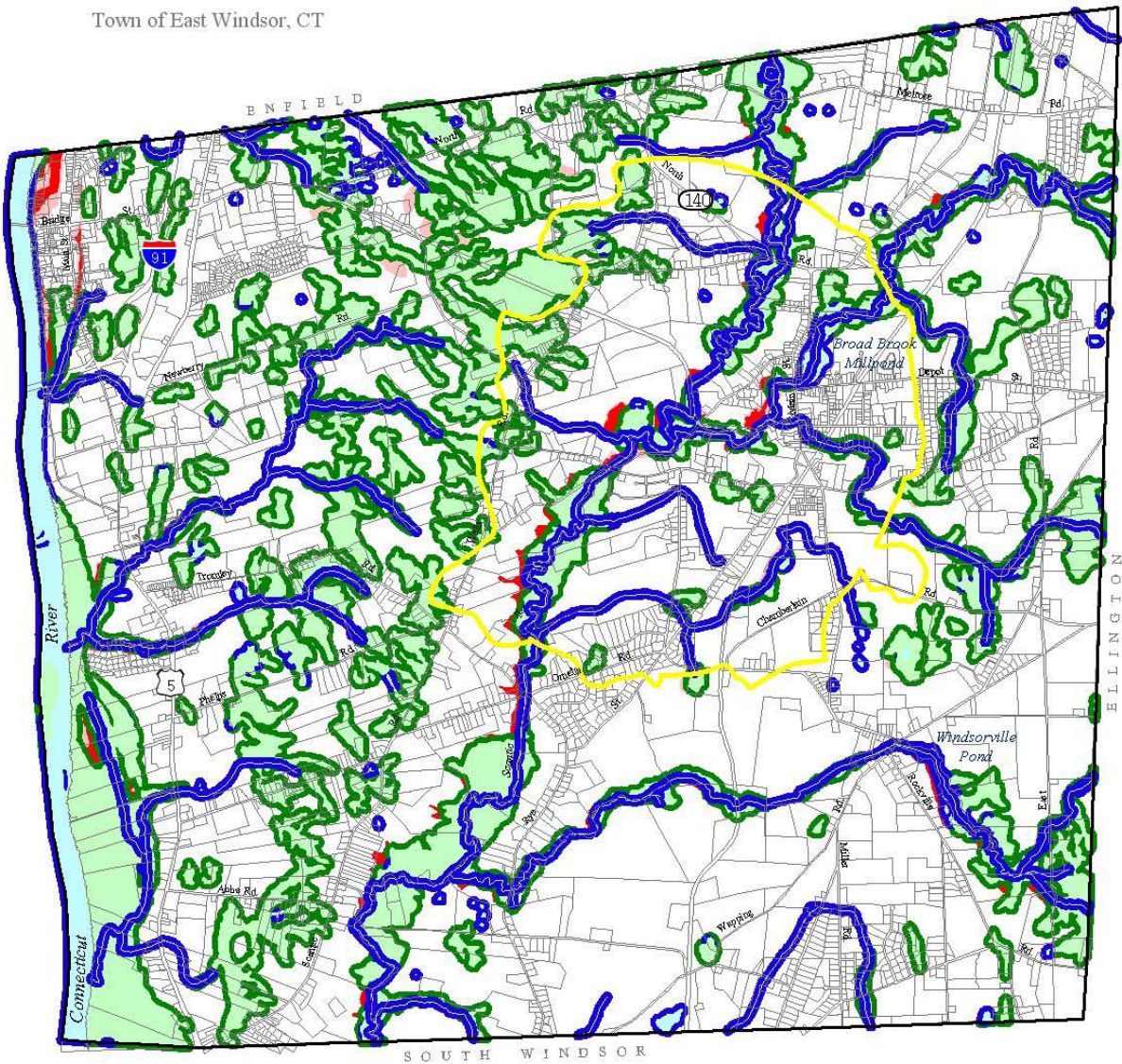
Floodplain: 100-year and 500-year floodplain associated with the Connecticut River and the Scantic River and tributaries are also shown on the Water Resources map. East Windsor has implemented zoning regulations to protect against increased flood hazards within the 100 year flood area as defined on the National Flood Insurance Rate Maps prepared by the National Flood Insurance Program. The most recent maps were prepared in 1978.

Aquifers: Much of East Windsor is underlain by aquifers capable of producing significant water supply. The present and future importance of this water has been identified by the Connecticut DEP's location of an aquifer protection zone, as depicted on the Water Quality map on page 2-15 and as already incorporated into the Town's zoning map. The district consists of approximately 3,128 acres, or 18 percent of the Town, and encompasses the Broad Brook area and over 2.5 miles of the Scantic River.



# Water Resources

Town of East Windsor, CT



## Legend

- Wetland
- Wetland Buffer (150 ft.)
- 100-year Floodzone
- 500-year Floodzone
- Aquifer Protection Area
- Water and Watercourses
- Water and Watercourse Buffer (150 ft.)

### **Open Space Ownership**

Town	294 acres
State DEP	675 acres
State Devel. Rights	366 acres
Private	215 acres

### **East Windsor Parks**

- East Windsor Park
- Warehouse Point Park
- Prospect Hill Park
- Pierce Memorial Park
- Broad Brook Pond
- Abbe Road Park
- Volunteer Park

### **Use Assessment (PA 490)**

The use assessment program (PA 490) enhances the perception of open space in East Windsor since it helps land remain undeveloped longer and it reduces the pace of growth.

The program contains three major components:

- Farm land (designated by the assessor),
- Forest (designated by the assessor or the state forester), and
- Open space (land must be identified in the Plan of Conservation & Development and adopted by Town Meeting).

### **Open Space**

Nearly 1,550 acres of East Windsor is currently considered open space, about 9 percent of the Town as illustrated by the map on the facing page. Ownership of this land is shown in the table in the sidebar.

Almost 300 acres of Town-owned land is dedicated to parks and nature areas. However, not all of this land is necessarily permanently protected open space. State-owned properties include the 500 acre Flaherty Field Trial Area, used for hunting and outdoor recreation activities, and 220 acres of land associated with the planned Scantic River State Park. Current plans for the Scantic River State Park call for expanding a greenway on the River, but no specific acquisitions have been identified. According to the DEP, the Scantic River Park is not a high priority for park development since the original funding was rescinded. Any additional acquisition for the Park must be initiated by a property owner.

The Northern Connecticut Land Trust, private clubs, and the Connecticut Water Company own about 215 acres of land considered open space, although the degree of protection and public access may vary.

Approximately 91 acres of forest land are temporarily protected from development under the PA 490 (CGS Section 12-107) tax abatement program, described on the next page. The East Windsor abatement program does not include land defined as “open space” in CGS Section 12-107.

### **Agricultural Resources**

Nearly three-quarters of the Town land area is composed of agricultural soils. In 1984, agricultural land use was calculated to occupy 27 percent of East Windsor’s land area and agricultural still occupies over 25 percent of the Town’s land.

Historically and today, tobacco farming has been an important land use in East Windsor and throughout much of the Connecticut River Valley and most of the active agriculture in East Windsor is tobacco farming. Other large scale agricultural uses are nursery stock production and horse farms. Numerous small scale vegetable operations are found in Town and at least one property raises cattle. However, no active dairy farms remain in East Windsor.

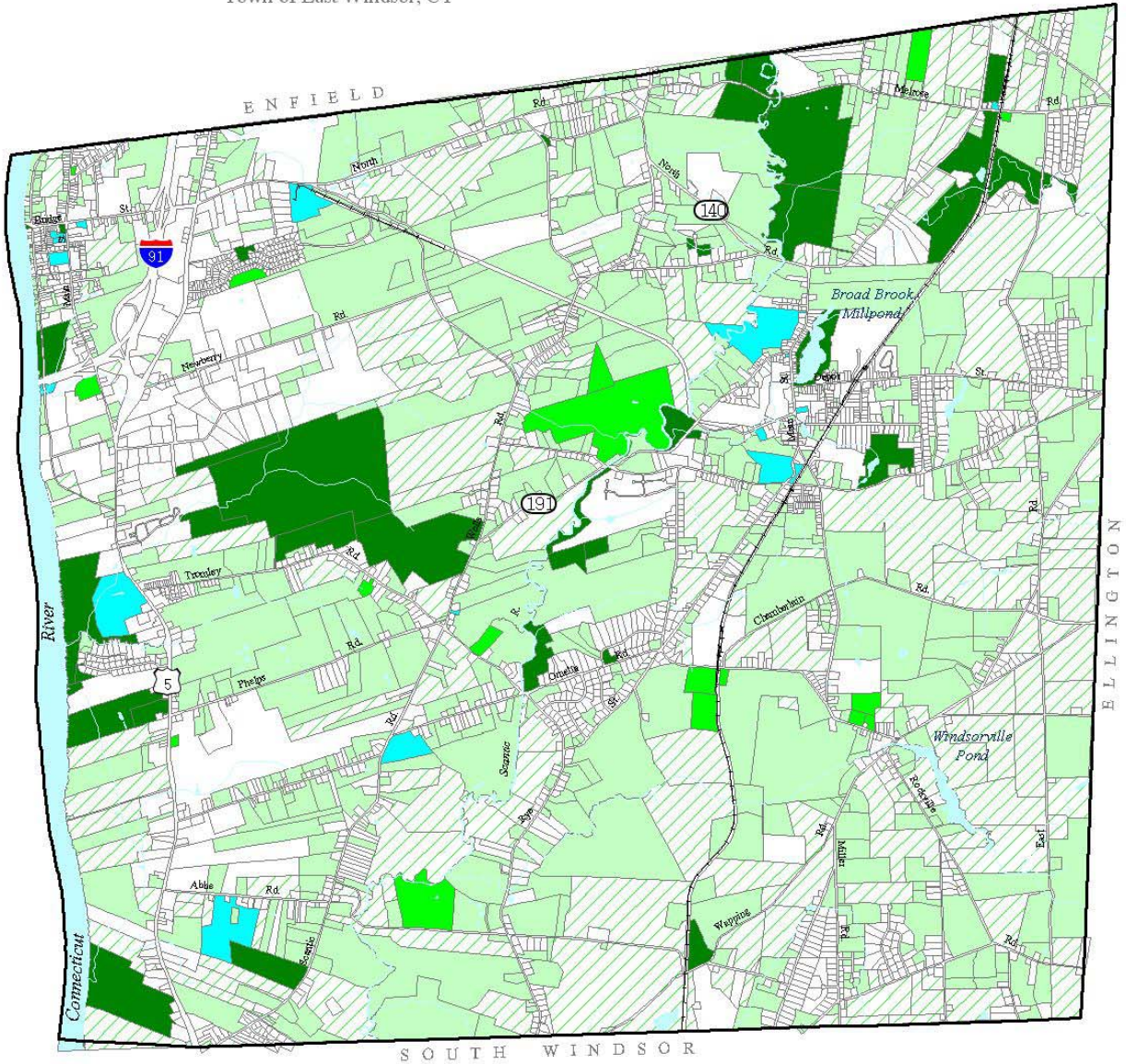
Agricultural use is encouraged by zoning regulations that designate 50 percent of the Town as agricultural districts, within which agricultural activities are permitted. About 550 acres of farmland are included in the PA 490 tax abatement program, described in the sidebar.

Over 7,690 acres of prime agricultural land and farmland of statewide significance occurs in East Windsor. The State Farmland Preservation program has acquired development rights to over 366 acres of farmland in East Windsor.



# Existing and Perceived Open Space

Town of East Windsor, CT



## Legend

- Institutional
- Community Facility
- Dedicated Open Space
- Managed Open Space
- Vacant Land and Land with Additional Development Potential
- Agriculture
- Rail
- Water and Watercourses

2000 0 2000 Feet



**Planimetrics**

31 Exchange Drive, Avon, CT 06001 860.577.5257

**Maximum Impervious  
Coverage – East Windsor  
Zoning**

---

R-1	25%
R-2	25%
R-3	25%
A-1	25%
A-2	25%
B-1	65%
B-2	65%
M-1	65%
M-2	75%
TZ-5	70%

## **Water Quality**

Water quality issues are of particular importance to East Windsor, including non-point source pollution, existing and potential contamination sites, septic systems, and underground storage tanks. Water resources in East Windsor define boundaries, delineate land uses, provided aesthetic and recreational benefits, provide water supplies, and generally contribute to the Town's character and quality of life.

Impervious surface coverage can be a predictor of water quality within a given defined area. Experts believe that water quality begins to decline when impervious coverage reaches 12 to 15 percent. East Windsor's zoning regulations provide standards for the maximum amount of impervious surface allowed on a specific parcel, as summarized in the sidebar. If the Town were ultimately built out to the maximum allowable impervious coverage, 31 percent of the land would be covered. While this level of coverage is unlikely town-wide, locally high impervious coverage may threaten high quality water resources.

## **Contamination Sites**

Two sites have been identified as contaminated from previous industrial or agricultural activities. Two former landfill sites also pose the possibility of contamination to ground or surface waters and will require monitoring. Additionally, groundwater contamination by ethylene dibromide (EDB), a pesticide historically used in tobacco growing, has been detected in some locations.

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### **Known Contamination Sites**

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Broad Brook Mill: The US Environmental Protection Agency (EPA) proposed this site to the National Priorities List (NPL) on December 1, 2000. Recently, however, the NPL listing of the site has been postponed in accordance with a recent agreement.

Rye Pesticide Site: A property on Rye Street was investigated for improper pesticide disposal by the Connecticut Department of Environmental Protection and subsequently buried materials were removed by the Federal EPA. Substances reported to have been removed included the pesticides toxaphene, parathion, diazinon, dieldrin, and the fungicide zineb. According to the EPA web-site report, no impacts to area populations or sensitive environments are known or suspected.

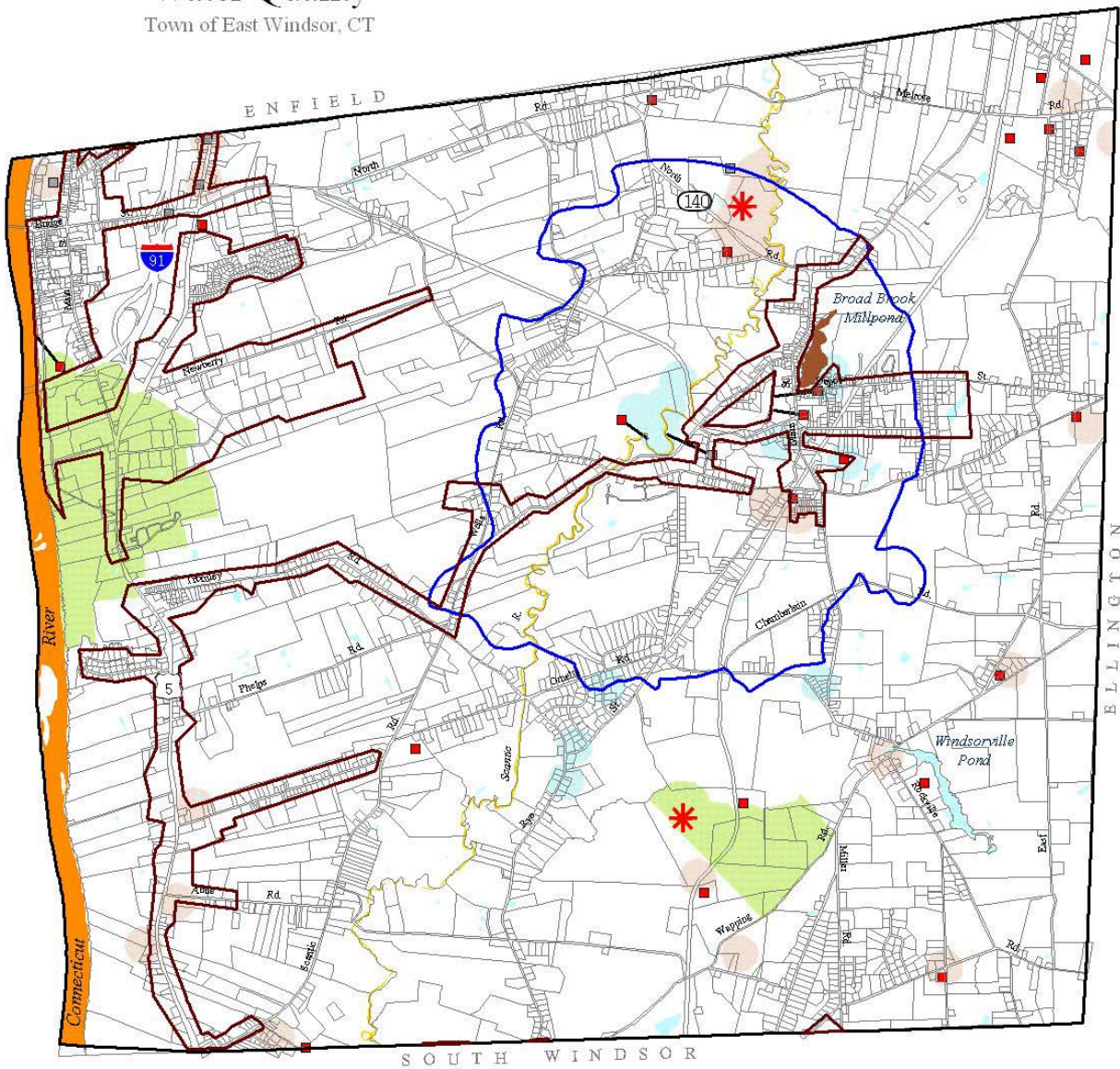
EDB Sites: In addition to the specific pesticide disposal site, investigation by the Connecticut DEP in the 1980's revealed the presence of ethylene dibromide, found to potentially cause short and long term health effects. The DEP negotiated a settlement with the responsible party that resulted in funding for installation and maintenance of water filters on approximately 180 residences identified as affected. Another 80 residences are being monitored. Maps of the affected areas are on file at the Department of Environmental Protection.

Land fills: Two former commercial landfill sites exist in East Windsor, shown on the map on page 4-15. The Kement site on Route 140 has been closed for several years. The NORCAP landfill on Wapping Road is in the process of closing and is expected to be completed by October of 2003. While no specific threats to ground or surface water associated with these landfills have been identified, monitoring well test data are filed regularly with the DEP.



# Water Quality

Town of East Windsor, CT



## Legend

### Surface Water Quality

- A, SA
- B, B\*, SB
- B/A, B/AA, C/A, SB/SA, SC/SA, SD/SA
- C/B, D/B, SC/SB, SD/SB

### Ground Water Quality

- GA
- GAA, GAAs
- GB
- GA, GAA May be impaired

### Leachate and Wastewater Discharge

- Active Site
- Inactive
- Discharge Direction Lines
- Aquifer Protection Area
- Former Landfill Sites
- Sewer Service



**Planimetrics**

31 Tappan Drive, Avon, CT 06001 860-577-5757

## **Water Pollution Control Ordinances**

1966 – Establish Sewer Authority  
1982 – Regulation of Town Sewers Usage  
1987 – Adjustments in Sewer Assessment for the Elderly  
1989 – Sewer Usage Regulation Amendment

## **Non-residential Underground Tanks**

Underground storage tanks (UST) for non-residential fuel and chemical storage are regulated by the Connecticut Department of Environmental Protection (Sections 22a-449(d)-1 and 22a-449(d)-101 through 113 of the Regulations of Connecticut State Agencies).

## **Other Environmental Issues**

**Septic Systems:** East Windsor has worked to address sewage management needs since the creation of a Water Pollution Control Authority in 1966. In 1992, a comprehensive Water Pollution Control Facilities Plan was prepared to provide the basis for sewer system expansion.

According to the Regional Health District Office, areas known to have septic system problems include sections of North Road (Route 140), Wells Road, along Route 5 (where sewers are planned), Prospect Street, Abbey Road, and parts of Scantic Road. Other areas of concern are scattered throughout town.

**Underground Storage Tanks:** In addition to the non-residential underground storage tank (UST) issues addressed by the State DEP, described in the sidebar, residential storage tanks also pose the risk of leakage of fuel into groundwater or directly into streams. State and federal regulations do not require removal of residential USTs, but towns may adopt ordinances for their mandatory removal. As of 1999, 36 towns in Connecticut adopted some form of UST regulations. East Windsor currently has no such standards.

**Resource Extraction:** Earth materials excavation is regulated in East Windsor by comprehensive zoning regulations that have an overall goal of eliminating non-conforming gravel pits. In addition to the continuation of non-conforming gravel pits, the regulations permit excavation as part of site plan or special exception approvals, or by Special Permit.

Because the forest cover is relatively young, little commercial forestry occurs in East Windsor. East Windsor is not one of the municipalities authorized to regulate forestry under Connecticut General Statutes; therefore forest practices in East Windsor will be under the authority of the DEP.



## Cultural Resources

The citizens and government of East Windsor have recognized the importance of preserving the Town's historic and cultural past by adopted an ordinance in 2000 creating a Historical Commission. The Commission is charged to identify, archive, and preserve all historically significant municipal property, promote awareness and appreciation of the Town's history, and assist private historic property owners with preservation and restoration goals.

A private Historical Society is also active in East Windsor and operates a museum in the East Windsor Academy Building in Scantic.

Five structures in East Windsor, listed below, have been recognized on the State and National Registers of Historic Places.

Structure	Location
Broad Brook Company (Broad Brook Factory)	Broad Brook
Melrose Road Bridge	Melrose
Thompson Farmstead (Pease Farm)	Melrose
St. John's Episcopal Church	Warehouse Point
East Windsor Academy	Scantic

The East Windsor Historical Commission and the East Windsor Historical Society have identified a number of other structures and sites as important historic assets.

Structure	Location
Broad Brook Opera House	Broad Brook
Scantic Meeting House	Scantic
Post Road Milestone	Scantic
Geissler Barber Shop	Scantic
Osborn Mill	Scantic
Scantic Covered Bridge	Scantic
Melrose School	Melrose
Warehouse Point School House	Warehouse Point
Warehouse Point Silk Mill	Warehouse Point
Residence on South Main Street	Warehouse Point
Tavern on Bridge Street	Warehouse Point
Windsorville "Church among Trees"	Windsorville
Windsorville Schoolhouse	Windsorville

## National Register

Designation as a National Historic Landmark or listing on the National Register of Historic Places (NRHP) is largely ceremonial. People typically assume the National Register of Historic Places is a protective program when it is actually only a recognition program.

This recognition entitles a property owner to display a commemorative plaque but only directly affects activities involving federal and/or state funding. It has little or no impact on the activities of the private sector. For renovations to income-producing properties, preservation tax credits are available if renovation is conducted in accordance with federal guidelines.

## State Register

Listing on the State Register of Historic Places (SRHP) is also largely ceremonial. This recognition also only directly affects activities involving federal and/or state funding and has little or no impact on the activities of the private sector.

## Definition

A buildable land regulation is based on the concept that not all land is created equal. Yet, when determining residential yield, most zoning regulations treat all areas the same despite the fact that some has less suitability for building.

“Buildable land” can be defined to exclude areas designated as 100 year floodplain on the FEMA Flood Insurance Rate Maps, inland wetlands, watercourses, slopes in excess of 15 percent, or land constrained by existing easements or permanent use restrictions.

## Zoning Density

Zoning standards typically assign a minimum lot size for residential development, that is, a number of acres per lot.

Density standards apply a number of lots to a given parcel of land, or a number of lots per acre.

Application of the density standards can be refined by specifying that it applies to land meeting specified characteristics, commonly called “buildable land.”

# Residential Development

The five single family residential districts in East Windsor total approximately 13,500 acres, or 80 percent of the Town’s land area. Over 70 percent of the residentially zoned land is available for future development, as shown below.

East Windsor recently revised its zoning standards to incorporate a density factor for subdivisions of more than four lots. The regulations apply these density factors to the entire parcel to be developed.

Current zoning district lot size standards and land area data are listed in the following table.

District	Min. Lot Size (Sq.Ft.)	Density (Lots/Ac)	Total Land Area (Ac)	Developable Land Area (Ac)
R-1	20,000	2.0	218	128
R-2	25,000	1.5	932	497
R-3	30,000	1.0	3702	3169
A-1	43,560	0.5	7019	5305
A-2	80,000	0.25	1678	557
Total	n/a	n/a	13,549	9,656

## Residential Build-out Analysis

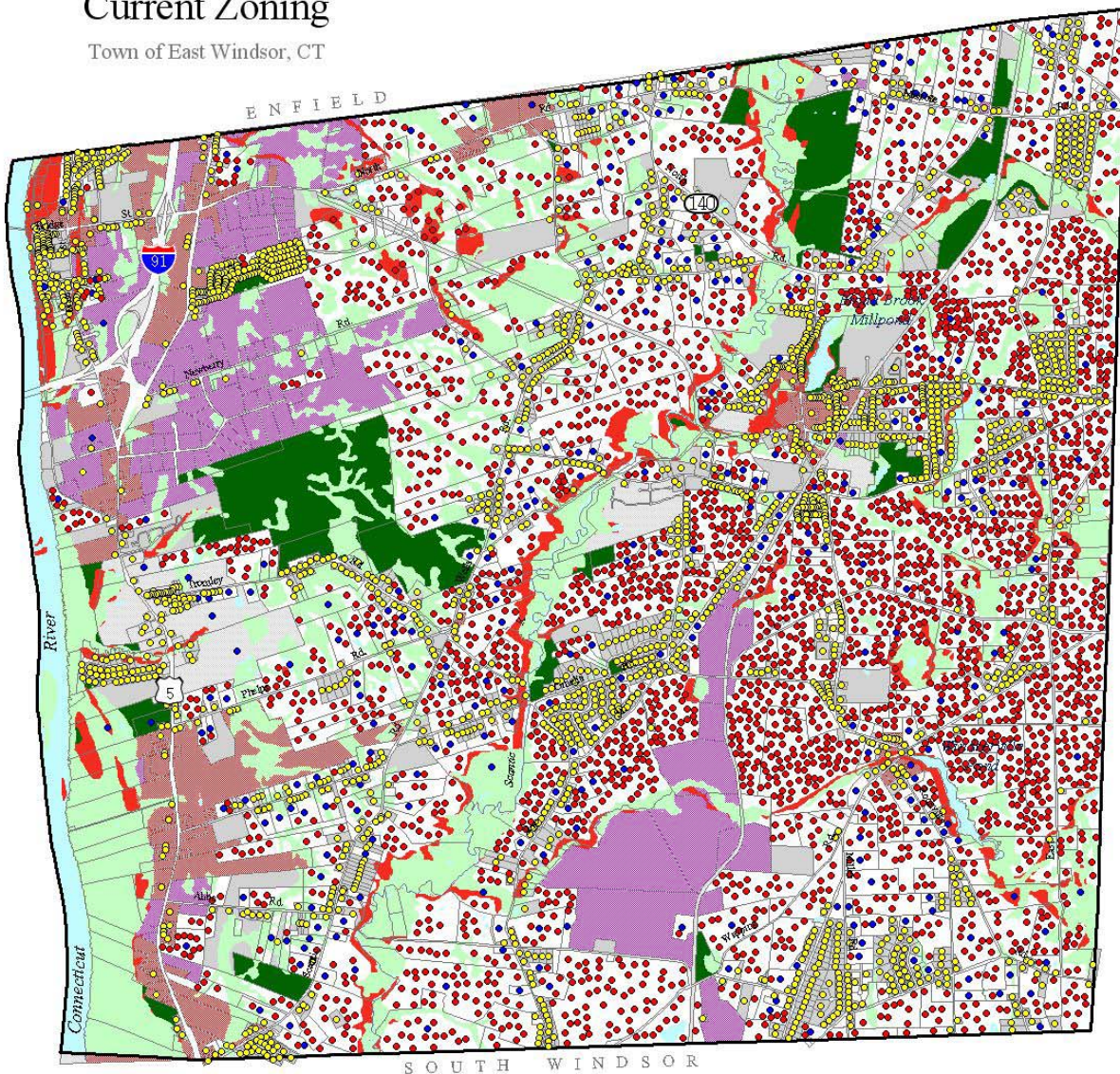
A build-out analysis is an effective tool for predicting development patterns, using geographic information systems data for the town and software programs that recognize the natural and design constraints that affect development yield.

As shown in the table above, nearly 10,000 acres of vacant or undeveloped property, farmland, and unprotected open space may be available for additional residential development in the future. A build-out calculation under the existing regulations results in a hypothetical ultimate development yield of 7,620 residential building lots, 3,120 more than currently exist. It is important to recognize that the analysis does not project a time frame or pace of development, but calculates the ultimate residential build-out potential in East Windsor.



# Hypothetical Buildout Current Zoning

Town of East Windsor, CT



## Legend

- |                                                  |                                 |
|--------------------------------------------------|---------------------------------|
| ● New Units                                      | Non-Residentially Zoned Parcels |
| ● Existing Units                                 | B-1                             |
| ● Icon Lots                                      | B-2                             |
| ■ Dedicated Open Space and Preserved Agriculture | M-1                             |
| ■ Wetland                                        | NA                              |
| ■ Floodzone                                      | SDD                             |
| ■ Water                                          | TZ-5                            |
|                                                  | ■ Developed/Committed Parcels   |

## East Windsor Village Areas

- Melrose
- Scantic
- Windsorville
- Broad Brook
- Warehouse Point

## Village Development

East Windsor has five distinct village areas that all reflect the Town's history and constitute an important component of the community character that define the Town.

Of the five village areas, only Melrose is located completely within a residentially zoned district. Properties in the Scantic and Windsorville village areas have various zoning designations, including limited areas for retail and personal service commercial uses. The table below lists the zoning designations and land areas for each in these two villages.

**Current Zoning Districts in Rural Village Areas**

<b>Zoning District</b>	<b>Scantic (acres)</b>	<b>Windsorville (acres)</b>
R-3	254	29
A-1	52	6
B-1	3.5	22

Broad Brook and Warehouse Point are considerably more developed and are the major municipal, social, and cultural focal points of East Windsor. Commercial and institutional uses are also extensive and each area includes several different zoning district designations, as listed in the table below.

**Current Zoning Districts in Center Village Areas**

<b>Zoning District</b>	<b>Broad Brook (acres)</b>	<b>Warehouse Point (acres)</b>
R-1	38	105
R-2	237	73
B-1	41	81
B-2	53	n/a
M-1	2	82
SDD	46	n/a

**Scantic**



**Windsorville**





## Business Development

Communities invest in economic development programs for a variety of reasons, the most common of which are:

- to provide local employment for residents,
- to make desired goods and services available locally, and
- to attract capital investment that translates into non-residential taxes.

While all of these motivations exist for East Windsor, the primary purpose for the Town's economic development program is to reduce the tax burden on the residents of the community by having a major portion of the cost of government services and facilities paid by businesses. For a community of its size, East Windsor has a surprising number of businesses, with 485 included in its current Business List.

East Windsor prides itself in having a non-residential portion of its Grand List approaching 40%. As the table below demonstrates, there has been some recent slippage in maintaining this level of business portion of the Grand List. This may be just a reflection of the last revaluation, coupled with the recent downturn in the business economy but continuing strength in the housing development market. However, it may be a leading indicator that additional attention should be paid to the recruitment of business capital investment.

**Business Portion of East Windsor's Grand List**

Year	Gross Assessment	Business Portion \$	Business Portion %
1999	\$601,298,015	\$233,455,731	39%
2000	\$611,035,523	\$238,313,071	39%
2001	\$627,871,998	\$243,330,381	39%
2002	\$763,714,953	\$273,302,393	36%
2003		Data not yet available.	

Source: East Windsor Tax Assessor

Commercial and industrial zoning currently define four zoning districts (not including the M-2 definition), as listed in the sidebar and as shown on the zoning map on page A-11. The tables below summarize the amount of developed and available land within each of the business districts.

Acreage of each of the four districts is tabulated below, along with the estimated acreage of undeveloped or underdeveloped land in each.

**Business District Acreage – Current Zoning**

District	Total land	Undeveloped Land
B-1	337	42
B-2	649	69
TZ5	1,892	448
M-1	121	3
Total	2,999	562

## Commercial Zoning Districts

B-1: Shopping Districts

B-2: Business Districts

M-1: Industrial Districts

TZ5: Transitional Zones

The Route 5 Corridor is East Windsor's primary area for economic development. Four different Business Districts exist within the Route 5 Corridor. In addition, small sections of the R-3 residential district are located along Route 5 and six separate areas are zoned as Special Development Districts, which allow multi-family housing.

An analysis of the existing boundaries of business districts along Route 5 shows that numerous parcels entirely or partially in commercial use districts are currently used for only residential development. Additionally, several undeveloped parcels exist in some of the commercial use districts. These properties are illustrated on the map on the facing page.

In addition to identifying available land within existing business districts, the analysis identified properties that may be appropriate for inclusion in an adjacent business district. These include properties that are currently located partly within a business district and partly within a residential district. Other potential business district expansion exists along North Road and along the eastern boundary of the existing industrial district. The map on the facing page illustrates the developable land within the existing Route 5 corridor.

The North Road Business Area is, in effect, an extension of the Route 5 Corridor. There are currently two business areas on North Road, with vacant land in between. The western business cluster, which actually extends onto Bridge Street at the Route - 140 Exit of I-91, is predominantly zoned Industrial (M-1), with smaller areas of B-1 and B-2 zones. Land use is a mix of retail, industrial and office buildings. The eastern business area is associated with the Mullen Road and Wells/Rolocut Road intersections with North Road, and is primarily retail and service in nature, zoned B-2, with a small B-1 area on the Enfield Town Line.

Additional development in the area has been constrained by a lack of sanitary sewers east of Shoham Road. Poor soils conditions preclude the use of on-site sanitary systems for larger scale commercial development. While there is a substantial amount of vacant land between the two business areas, it is currently zoned Agriculture (A-1) and contains a significant amount of wetlands as illustrated by the map below. While sewage treatment capability is necessary for additional business development along North Road, careful analysis is necessary to compare the potential return from developable land with the costs of extending the Town's sewer lines or serving the area with a package treatment plant.

Included in this area is the Trolley Museum, one of East Windsor's tourist attractions, but reportedly in financial difficulty. Expanding economic development in this area, particularly uses aimed at visitors, could be expected to create more business for the Trolley Museum, improving its economic viability.









# Route 5 Developable Land

Town of East Windsor, CT



## Legend

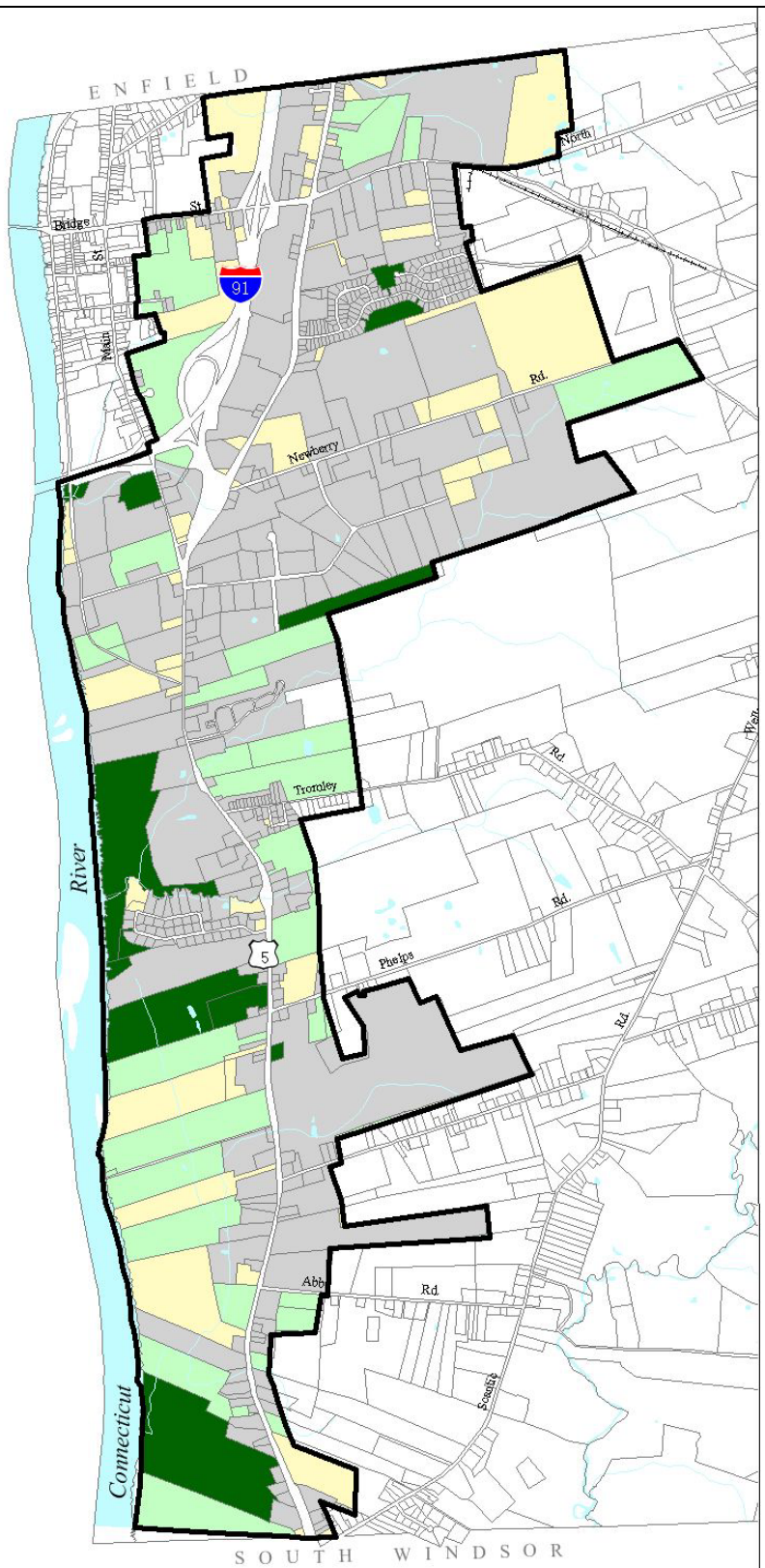
-  Route 5 Corridor
-  Developed
-  No Current Commercial Development
-  Vacant
-  Open Space
-  Water

0 3000 Feet



**Planimetrics**

31 Fenner Drive, Avon, CT 06001 860.677.5767



## **M-1 Railroad Industrial District**

The large M-1 district associated with the rail line in the southeastern quadrant of Town lacks critical water and sewer infrastructure and has very poor road access. On the other hand, it has an active rail line, several existing businesses, and extensive vacant land with good physical features.

Three key questions shape consideration of this area:

- If this area will not be developed industrially, what is the best use?
- How long will the rail line remain active?
- How likely is the demand for rail served sites in this part of Connecticut?

Zoning Regulations: East Windsor's zoning regulations that apply to business development are detailed and comprehensive. In general, they are also supportive of economic development.

### B-1, B-2 and M-1 Districts

- Permitted uses for both business (B-1 and B-2) and industrial (M-1) districts allow a wide variety of uses typically found in such zones.
- Bulk and area requirements are reasonable, although the 20% maximum building coverage in the B-1 district is restrictive for single story buildings.
- Parking requirements are reasonable.
- Signage regulations are reasonable.
- Performance standards are reasonable.

### TZ5 District

- The requirement that all new uses in the TZ5 district be approved by Special Permit will discourage some potential developers.
- Required landscaped setback areas result in a series of small, rigidly defined and visible lots, rather than give the appearance of a unified and well-planned area of the community.
- The transition in primary character in what is now the TZ5 district from residential to commercial has progressed enough that consideration should be given to changing to zoning district to the commercial type that this area is intended to become.

### M-2 District

East Windsor's Zoning Regulations include bulk, area and use regulations for an M-2 district that does not appear on the Town's Zoning Map nor is applied to any properties. There are few substantive differences between the M-1 and M-2 districts. The only uses allowed in the M-2 district (by Special Permit) that are not allowed in the M-1 district are the manufacture and storage of chemicals, plastics, toxic and hazardous materials and solid waste facilities.

## **Business Infrastructure**

With the exception of the M-1 manufacturing district associated with the rail line in the southeastern quadrant of the Town, road access for economic development purposes is generally adequate, and has convenient access to Route 5 and/or Interstate 91. While the Railroad Industrial M-1 district has substantial vacant acreage, rail service, and several existing industries, the development of this area is hampered by a lack of direct or convenient access to Route 5 and I-91. The most logical routing for such a connection would be by extending Plantation Road to Abbe Road. However, this would require expensive bridging of the Scantic River and would cause heavy trucks and other traffic to pass through the existing residential area at the east end of Abbe Road.

Development within a portion of the existing Industrial Park area would be facilitated by conversion of the Craftsman Road extension from a private to a public road. Current regulations do not allow the creation of additional lots on a private road, which results in a portion of the vacant acreage in the Industrial Park being unavailable for development. A less desirable alternative to the Town taking ownership of this road would be to amend regulations to allow the creation of lots on a private road.

Utility infrastructure supports economic development where utilities are available. There is substantial unused sewer capacity and adequate water supply and pressure (although some areas with pressure limitations exist).

Two areas identified for future economic development lack critical utilities:

- The M-1 railroad manufacturing district lacks both public water and sewer. While private wells, supplemented by a water tank for fire protection, might be adequate for water supply, sanitary sewers are more of a problem, given this area's distance from the Town's sewage treatment plant and need to cross the Scantic River. Use of a package treatment plant must be considered if major development is to occur in this area.
- Sewer lines exist in North Road only to the vicinity of Shoham Road. Some existing business development in the un-sewered area zoned for business use already has problems with septic fields. While there is substantial undeveloped acreage between the two existing business districts that logically could be connected into an extended business district serving the northern portion of East Windsor, southern Enfield and those using the Route 140 exit of I-91, this area requires both rezoning from an Agricultural district and provision of sanitary sewers because of poor soils and high groundwater. Limitations on development because of wetlands require a cost-benefit analysis of this area to verify that the payback through tax revenues from development is adequate to justify the expense of sewerage this area.

### **Municipal and Community Role**

The Town's economic development efforts are overseen by an Economic Development Commission operating with a modest budget and are carried out by the Town Planner on a part time basis because of numerous other duties. The Town Planner has had entry-level training in economic development. Members of the Economic Development Commission have a variety of experience in business, but no training in economic development. Both staff and Commission members are in need of additional training and would welcome it.

East Windsor has its own Chamber of Commerce, which currently has a strong relationship with the Economic Development Commission because of shared leadership. The Town is also a member of the "4 Town Chamber of Commerce" along with Enfield, Somers and Ellington. Although supportive of economic development, this Chamber is not a major factor in East Windsor's economic development efforts.

East Windsor is also a member of the MetroHartford Alliance, which is a cost-effective way to promote marketing of the region. East Windsor will also be a financial supporter of the regional Comprehensive Economic Development Strategy (CEDS), which may make priority projects of the Town eligible for funding from the U.S. Economic Development Administration.

**Route 5 Corridor**



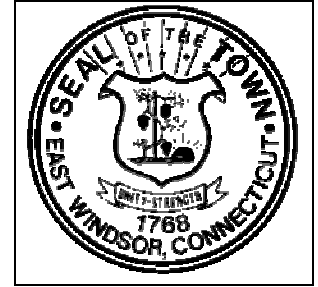


## Infrastructure

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Public facilities and infrastructure constitute the framework for the provision of municipal and utility services and for meeting a town's basic structural needs. These include:

- municipal facilities
  - town offices,
  - fire and police stations,
  - senior center,
  - community center,
  - libraries,
  - parks and recreational assets
- school system
- infrastructure
  - public works,
  - roads,
  - sewers, and
  - electric, gas, water, and communications systems



These assets and facilities are generally well-established and functional in East Windsor. The location of existing municipal facilities and properties is illustrated on the map on the following page.

**Wastewater Treatment Plant**



**Pump Station Construction**



### Space Needs Assessment

Function	Sq.Ft.
First Selectman	1,080
Planning and Development	1,165
Building Dept	810
Assessor	1,380
Town Clerk	1,300
Tax Collector	1,200
Treasurer	1,150
Registrars	220
Human Services	1,660
Meeting Rooms	3,800
Kitchens, Baths, Storage	2,100
Circulation	4,260
Mechanical	4,000
Total	24,125

Source: 2002 Selectman's Office

### Priority Municipal Space and Facility Needs

- Administrative Offices
- Public Safety Offices and Facilities
- Senior Services
- Current and Future School Facilities
- Recreational Opportunities

### Municipal Facilities

Town officials have recognized the need for additional municipal office and service space for several years. Virtually all departments interviewed described current space conditions as insufficient to meet needs over the next ten years, with the exception of Public Works.

Even without dramatic growth in East Windsor's population, the community's interest in growing its economic base, providing recreational amenities and social services, and ensuring that new development follows appropriate guidelines will require that adequate municipal office space and other facilities are available.

Added to these administrative needs are the program needs of human services, elderly services, civic and social meeting space, public safety requirements, and other municipal administrative needs. The sidebar table lists the municipal office and program needs identified for consideration in the Plan of Conservation and Development.

Town Hall: The Town Hall building on Rye Street consists of 8,766 square feet of total floor area. Approximately 30 parking spaces are available immediately adjacent to the building. Additional parking for another 30 – 40 cars is provided on the same parcel, but used primarily by the adjoining elementary school.

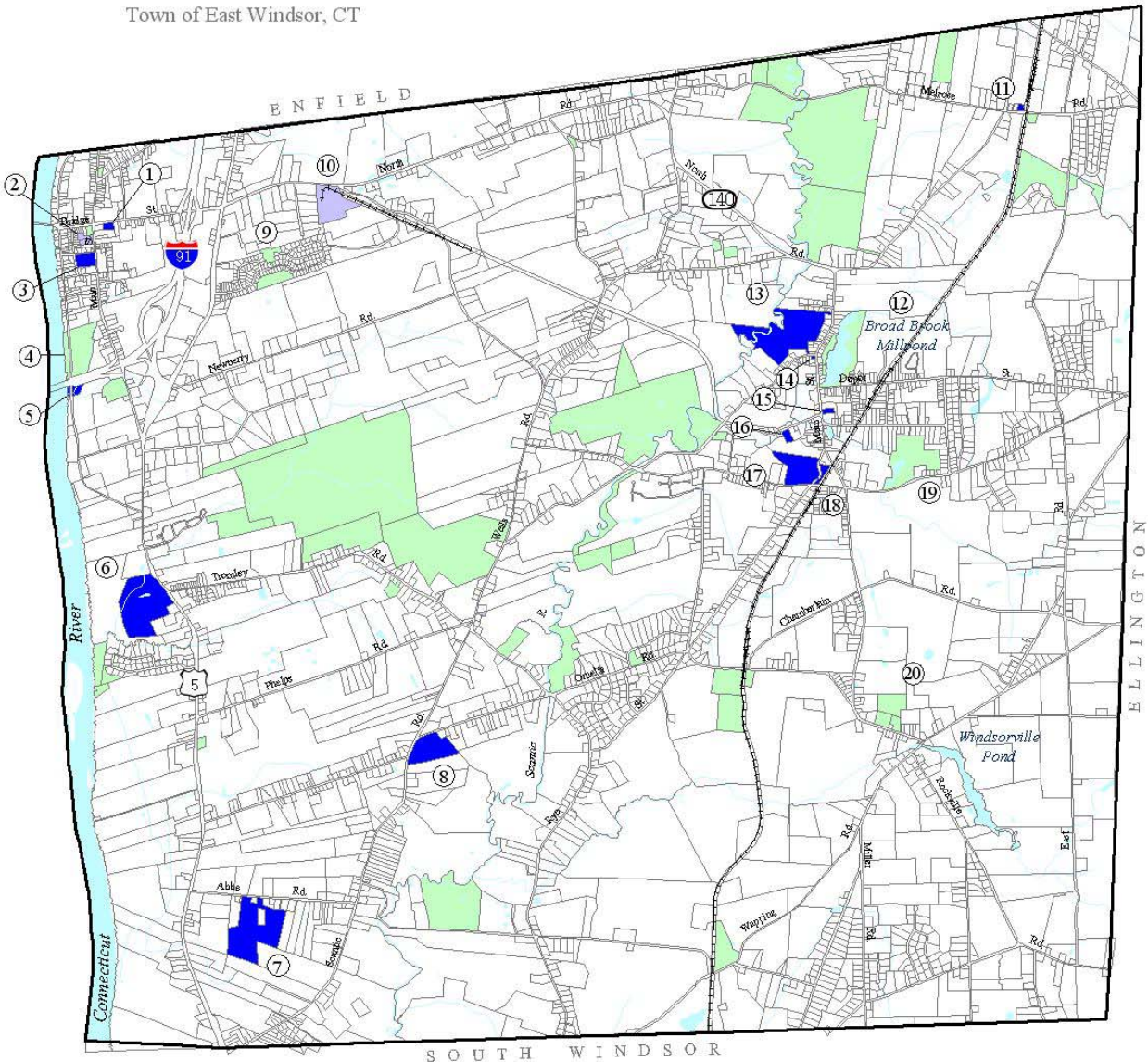
Town Hall is occupied by several municipal offices, including the First Selectman's office, the Planning and Development Department, the Town Clerk, Tax Collector, Assessor, Building Inspector, and Parks and Recreation Department. An evaluation of space needs conducted in 2002, listed in the sidebar, calculated that these offices actually require a total of over 9,500 square feet, plus additional floor area for storage, circulation, common areas, and mechanical areas. The Treasurer's office, Human Services Department, and offices for the Registrars, now in the Town Hall Annex, were expected to require another 3,030 square feet.

Town Hall Annex: The Town Hall Annex on School Street provides office, meeting, and recreational space, including the offices of the Treasurer, Human Services, and the Town Registrars. The Annex site consists of a nearly four acre parcel, occupied by a former school building, only part of which is available for public use, the East Windsor Police Station, and the East Windsor Ambulance Association offices and garage. Extensive renovations would be necessary to the former school building for public use.

The availability of community activity space, meeting site, and offices in Warehouse Point will remain important to the community. The site has ample space for construction of a new building, if the former school structure is removed. Alternatively, renovation of all or part of the existing structure may provide suitable space.

# Community Facilities Map

Town of East Windsor, CT



## Public Safety Facilities

1. Warehouse Point Fire House
3. Police Station/Town Hall Annex
15. Broad Brook Fire House

## Schools

6. East Windsor Junior/Senior High School
13. East Windsor Intermediate School
17. East Windsor Elementary School

## Recreation Facilities

4. Volunteer Park
9. Prospect Hill Park
12. Broad Brook Pond Park
19. East Windsor Park
20. Pierce Park

- Community Facility - Town
- Community Facility - Private
- Open Space

## Other Facilities

2. Warehouse Point Library
5. Sewage Treatment Plant
7. Boy Scout Hall
8. Public Works
10. Connecticut Trolley Museum
11. Historic Schoolhouse
14. Broad Brook Library
16. Animal Shelter
18. Town Hall

0 2000 4000 Feet



**Planimetrics**

31 Trinity Drive, Avon, CT 06001 860 577 5217

Expansion Potential: The Town Hall and Town Hall Annex sites are located in R1 residential use districts. East Windsor zoning regulations allow use of residentially zoned land for “Buildings used exclusively for governmental purposes, either Town, County, State, or Federal” (5.1.9) and “municipal parks, playgrounds, and recreational and community center buildings and grounds for games and sports.” (5.1.6) Therefore, expansions or new construction of municipal facilities at these locations is a theoretical option to the Town.

The following table analyzes the zoning requirements that would apply to development or redevelopment of the two existing Town office sites. The analysis calculates parking requirements based on the current zoning standards and assumes a new or expanded building to the maximum allowed coverage based on total impervious coverage limitations in the zoning regulations.

<b>Zoning Requirements – Existing Municipal Office Sites</b>					
<b>Site</b>	<b>Site Area</b>	<b>Conceptual Total Floor Area</b>	<b>Required Parking</b>	<b>Total Impervious Coverage</b>	<b>Maximum Impervious Coverage</b>
Town Hall	2 ac. (87120 sq. ft.)	10,000	15,840	25,840	30% - 26,136
Annex	4 ac. (174240 sq. ft.)	20,000	31,680	51,680	30% - 52,272

Although the numbers in the previous table are approximate, the analysis shows that a new building or expansion of the existing buildings at the Annex site could be limited to a total of about 20,000 square feet. New or expanded buildings at the Town hall site could not exceed about 10,000 square feet, including the existing or remaining buildings in each case. Additionally, the site has insufficient land for parking and building expansion and the immediate area is already crowded with multiple public uses, including the school and Saint Catherine’s Church.

This indicates that even maximum use of both of these sites would not provide the space needs identified. However, in combination with other options these sites may remain important components of an overall municipal facilities plan.

Broad Brook Mill: Another municipal complex option to consider is the acquisition of the Broad Brook Mill building. The site includes a former industrial mill building converted to residential condominiums (Millbrook Condominium Association). Historic industrial uses resulted in site contamination that precipitated a site investigation by the US EPA and resulted in a proposal for inclusion on the Superfund National Priorities List.

An agreement in December 2003 between EPA, Connecticut DEP, and Hamilton Sunstrand deferred the listing in favor of a cleanup under the State DEP authority. The current plan for site cleanup entails conveyance of the condominium property to Hamilton Sunstrand to allow the cleanup to proceed. The company has previously indicated a willingness to transfer the property to the Town at no cost following cleanup.



## **Public Safety**

Police: East Windsor police headquarters are located adjacent to the Town Hall Annex on School Street and Main Street in Warehouse Point. Recent and ongoing renovations and improvements to this facility are expected to satisfy the Department's needs for up to ten years.

Current staffing consists of twenty sworn officers and seven administrative staff. East Windsor ranks 36<sup>th</sup> out of 169 Connecticut towns in police spending expenditures, although the expenditures per capita are only slightly above the statewide average (CPEC 2000-2001).

Fire Protection: East Windsor supports two volunteer fire departments: Warehouse Point Fire Department and Broad Brook Volunteer Fire Department. Response is coordinated by the regional dispatch service and both departments generally respond to all calls, especially during the day when volunteer availability is limited.

The Departments report a total of 97 volunteers. While coverage appears to be sufficient currently, both Fire Chiefs express concerns about maintaining an adequate base of volunteers, particularly to ensure coverage during normal business hours when most volunteers are working at full time jobs. The Town pays the volunteers a \$10 per call fee.

The Warehouse Point Fire Department is managed by a District Fire Commission originally created in 1910. The District manages two fire stations: one on Bridge Street in Warehouse Point and the other on Stoughton Road in the southwest corner of the Town. Both stations are sufficient for the current equipment, although office, storage, and training space are limited.

The District has upgraded its equipment over the past ten or so years, through a capital improvement program supported by Town funding and grants obtained by the District. The fire stations are believed to be sufficient for the equipment and staffing currently in use, although the District has sought additional service vehicles and rescue equipment.

Communications systems are in the process of being upgraded and are expected to be adequate for the foreseeable future, although annual maintenance and upkeep will be required. Dispatch is by the regional emergency dispatch service which directs all calls to both Warehouse Point and Broad Brook. Both Departments generally respond to any call, to ensure adequate staffing.

Communication and coordination between the two fire departments is considered good by both Chiefs. Training and other administrative functions are coordinated and expertise on equipment and apparatus is shared.

The two Fire Departments have identified a long term planning issue to be the need for another fire station located near the southeastern part of Town where much of the recent residential development has occurred. However, no specific time frame has been identified.

Ambulance Service: The East Windsor Ambulance Association is also located adjacent to the Town Hall Annex in part of the original school structure. According to the Chief of Emergency Medical Services, additional or new space is necessary to provide adequate sleeping quarters, storage, office, training, and equipment cleaning. Additionally, the current garage is barely able to fit the large ambulance kept there.

The Association and Town officials have recognized the need for an ambulance garaged in the vicinity of Broad Brook to expedite response time to all areas of the community.

The Association recently established itself as an Advanced Life Support Paramedic Unit and hired paramedics to provide 24 hour paramedic service. Approximately half of the 36 member staff are paramedics and the balance are Emergency Medical Technicians. All staff is compensated, and there is no current shortage of available personnel. However, all of the paramedics and EMTs are part time and work full-time elsewhere.

### **Other Municipal Services**

Senior Center: As noted in the Workbook on Trends and Conditions and illustrated in the sidebar, East Windsor, as with many towns, will see an aging population over the next ten to twenty years. With this will come a coincident increase in demand for elderly services. As of the 2000 census, over 25% of the Town's population was 55 or older. That proportion is expected to increase to over 35% by 2020. Therefore, planning to meet the growing demand for senior services is an important consideration in the Plan.

The East Windsor Senior Center current occupies space in the Broad Brook Fire Station building. According to the Director, space is adequate for the 100 visitors per day that the Center averages. However, the site is unable to accommodate the interest in special events, such as Holiday parties. Additionally, programs are limited because of space constraints. For instance, inadequate storage precludes many arts and crafts programs.

In addition to the space constraints, the current site is not handicapped accessible, nor is it conveniently located for pedestrian friendly access by seniors to shopping and personal services. Although the senior transportation program is seen as generally adequate by the Director, requests to provide more and additional specialized transportation service cannot now be accommodated.

Libraries: East Windsor's primary library resource is located on Main Street in Warehouse Point. The Warehouse Point Library is run by an Association, which owns the library building and an adjacent parcel, totaling 2.7 acres. The structure was renovated and expanded fourteen years ago. The Town supports the Library with annual budget funding, totaling \$128,000 in Fiscal Year 2002, which is approximately 40% of the total Library budget. The balance comes from endowment income, grants, and fundraising.

The Warehouse Point Library is facing the need for extensive improvements and upgrading of space, computers, and HVAC. As part of their planning to meet these needs, the Board will be establishing direct communications with the Town.

The Library Board sees a need for a new or significantly expanded facility within the next ten years. The current location is satisfactory and expansion could take advantage of the adjacent parcel owned by the Association. Alternatively, other more centrally located sites could be considered for an entirely new facility, allowing the sale of the existing Association properties.

A second library is located in Broad Brook, although it is only open for limited hours each week and offers a more limited selection. Staffing and operation of this library is by a volunteer Board of Trustees, supported by municipal funding, in the amount of \$10,500 in FY 2002. There are no plans for expansion or improvements pending.

Parks and Recreation: The Parks and Recreation Department is staffed with a Director and two other full time personnel, plus seasonal maintenance staff.

East Windsor owns and maintains seven Town parks, which include 13 soccer and 14 baseball fields. Demand for such recreational facilities is growing and the current facilities are not likely to remain adequate over the coming ten year period.

Additionally, although the Town and the School System cooperate on public use of school facilities, additional space for indoor recreational activities and programs will be necessary to meet growing demand. Currently, Parks and Recreation offers indoor programs at East Windsor school facilities, although scheduling is dependent on availability with school programs having priority.

Parks and Recreation is limited in its ability to expand the offering of indoor programs and activities by the unavailability of suitable activities space.

Community Center: No single community center for public events and activities exists in East Windsor. In addition to use of the school facilities, as discussed above, municipal, recreational, civic, social, and other activities take place at the Town Hall in Broad Brook, the Senior Center in Broad Brook, and the Town Hall Annex in Warehouse Point.



## Enrollment Factors

In most communities, school enrollments are a function of overall demographic trends.

For example, the “baby boom” refers to a large number of people born in the United States between 1945 and 1965 (with a peak around 1955). As a result, school enrollments in the nation peaked around 1970 as the peak of the baby boom moved through the school system.

The period between 1965 and 1980 has been referred to as the “baby bust” (due to the lower number of births during this period). This demographic group resulted in low school enrollments around 1990.

Meanwhile, since the baby boom peak reached age 35 in 1990, the birth rate in Connecticut peaked at that time. As a result, enrollments in many communities are expected to peak by 2005 as this “baby boom echo” moves through the school system.

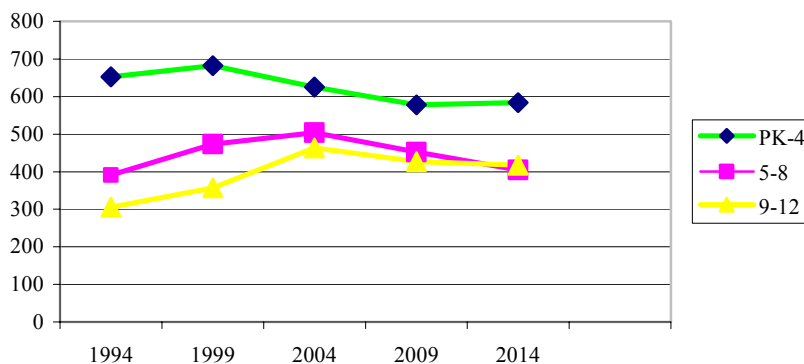
## Schools

**Enrollment:** The latest school age population projections for East Windsor by the State Department of Education (December 2003) are provided in the table below. These indicate that the school population will decrease from 1,592 in 2003-2004 to 1,406 by 2013-2014. However, the most recent actual enrollment data for East Windsor indicates a current school population of 1600, slightly above the Connecticut Department of Education projections for the current year. Projected peaks for each grade group are highlighted in the table below.

East Windsor School Enrollment					
Year	Pre-K	PK-4	5-8	9-12	Total
1993-94	40	652	391	305	1,348
1994-95	40	698	400	330	1,428
1995-96	40	712	413	325	1,450
1996-97	60	763	443	334	1,540
1997-98	60	723	467	348	1,538
1998-99	59	682	473	357	1,512
1999-00	70	660	499	375	1,534
2000-01	57	582	537	399	1,518
2001-02	58	622	533	434	1,589
2002-03	58	621	529	429	1,579
Projected					
2003-04	62	625	504	463	1,592
2004-05	62	623	456	508	1,587
2005-06	62	624	436	512	1,572
2006-07	62	596	435	511	1,542
2007-08	62	606	424	472	1,502
2008-09	62	578	452	427	1,457
2009-10	62	581	443	408	1,432
2010-11	62	575	427	410	1,412
2011-12	62	580	426	402	1,408
2012-13	62	578	405	423	1,406
2013-14	62	584	405	417	1,406

Source: Connecticut Department of Education 12/04/2003

East Windsor School Enrollment



Source: Connecticut Department of Education 12/04/03



School Facilities: East Windsor has three school locations: an elementary school and a middle school in Broad Brook and a high school on Route 5. The School Board recently reorganized the schools to address enrollment and demographic changes and for space efficiencies. Although this has provided adequate basic space for current conditions, it has not fully addressed the need for core facilities such as athletic facilities, lockers, laboratories, and cafeteria space, according to the Schools Superintendent.

Additionally, eight modular classrooms are installed at the Elementary School and the school administration is about to install five more. This strategy provides the administration with flexibility to respond to unexpected changes in enrollment. It also meets short term space needs to allow planning for longer term, more permanent changes. If enrollment declines, the modular units would be phased out over time.

## **Road Classification**

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### **Limited Access Highway –**

A regional, high speed road with controlled access points; > 50,000 cars per day.

**Arterial Road** - A road primarily intended to carry regional traffic and serve major activity centers; 10,000-20,000 cars per day.

**Collector Road** - A road intended to serve business areas and/or distribute traffic between arterial roads and neighborhoods; Major – 1000 -10,000 cars per day, Minor – <1000 cars per day.

**Local Street** - A road primarily intended to provide access to abutting properties and not serve major through traffic.

## **Infrastructure**

**Public Works:** Public Works is housed in a relatively new facility on Scantic Road. According to the Public Works Director, the facility is adequate for the foreseeable future, once a new shed for storage of road salt is completed.

**Roads:** The Public Works Director reports no unusual concerns about the road system in East Windsor. East Windsor is in the process of preparing an updated pavement maintenance plan. Additionally, ongoing drainage improvements are included in the Town capital budget, as are paving and sealing projects. Public works has acquired new software to assist in the drainage maintenance and improvement program.

Street designations are provided in the East Windsor Subdivision Regulations. The 1998 Plan of Conservation and Development classified Town streets based on function and traffic volume. The guiding criteria for road classification are listed in the sidebar.

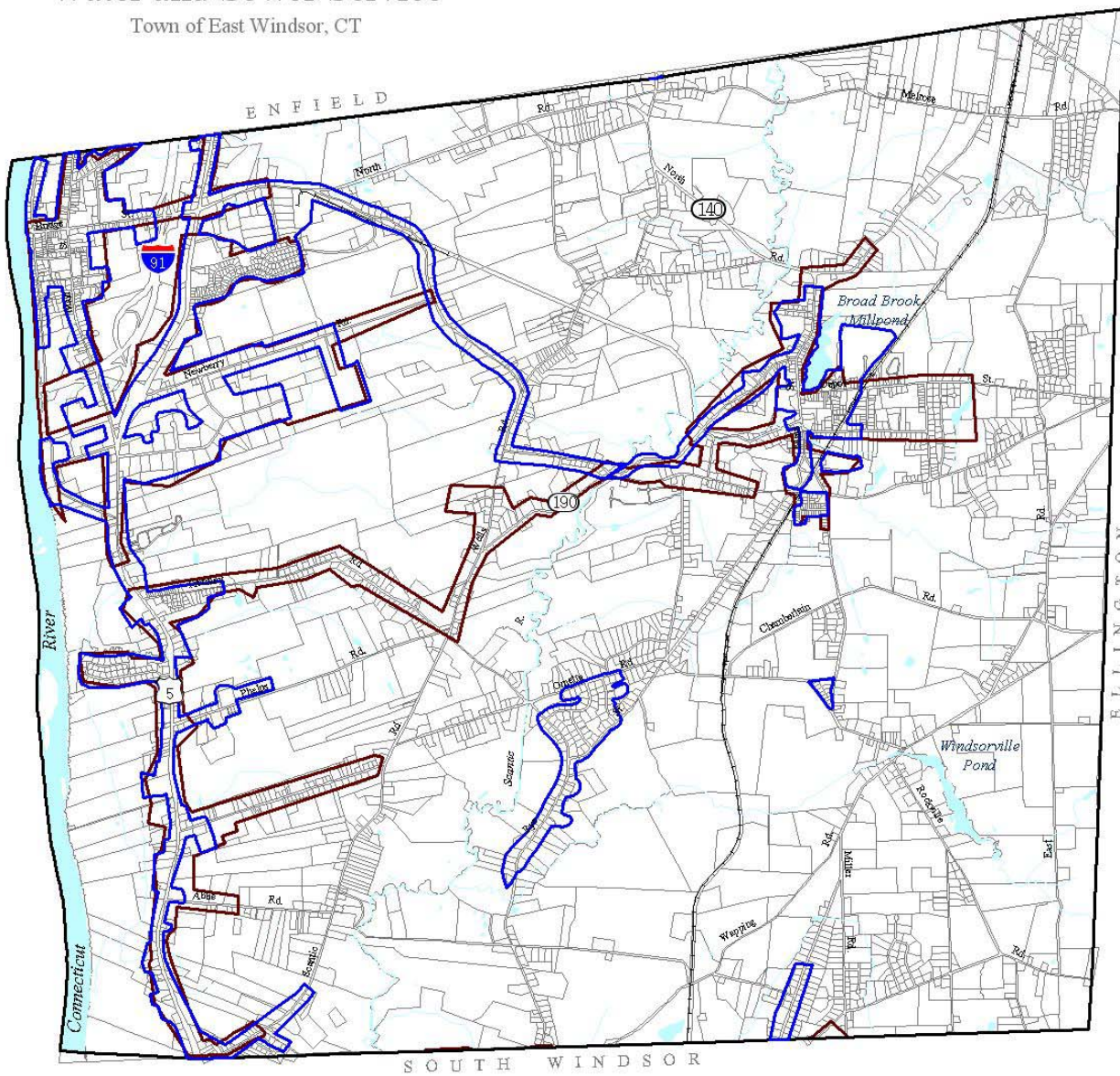
**Wastewater Management:** The sewer collection and treatment facilities in East Windsor are operated by the East Windsor Sewer Authority. Approximately 33 miles of sewer collector pipe is in place, as shown on the map on page 25. The wastewater treatment facility located on South Water Street has a capacity of 2.5 million gallons per day, compared to current usage rates of approximately 1.2 MGD.

Recent improvements to the system added a pumping station on Newberry Road and line extension out to the end of Newberry Road, opening up additional sites for potential industrial development.





The sewer service area also encompasses Broad Brook and residential areas between the Scantic River and Route 5. The availability of sewer service influences residential development patterns, as well as commercial and industrial use of land. However, the Town has established a sewer avoidance area that covers all of the area east of the Scantic River, except Broad Brook.

# Water and Sewer Service

Town of East Windsor, CT



## Legend

-  Water Service Areas
-  Sewer Service Areas
-  Rail.shp
-  Water

0 3000 Feet



**Planimetrics**

31 Ensign Drive, Avon, CT 06001 860-677-5267

Public Utilities: Water service is provided by Connecticut Water Company to the areas of East Windsor illustrated by the map on the facing page. According to the company, ample excess capacity exists for delivering water to the East Windsor system.

The company operates several water supply wells in the Broad Brook and Scantic area and owns a large parcel of land dedicated to water supply wells. The presence of the wells is reflected in the designation of a well-field conservation area and in the delineation of the preliminary Aquifer Protection Zone, based on the Connecticut Department of Environmental Protection.

In East Windsor, the gas service area is extensive, and affords many East Windsor residents and businesses, as well as municipal facilities such as schools, another energy option. The gas service provider, Yankee Gas, reports no immediate plans for extension or expansion of gas mains in East Windsor. Yankee Gas is not aware of any backlog of requests for service or requests for gas main extensions to serve any new areas of Town. Yankee Gas has an active marketing program and will discuss options for gas line extensions and service connections with potential developers or Town representatives at any time.

Electric service is provided by Connecticut Light and Power Company. Town staff is not aware of any service problems unique to East Windsor.

Wireless telephone service is widely available throughout East Windsor, as may be expected by the proximity to Route 91. Cable television service is provided Cox Communications, which offers a full range of media, internet, and communications services. The cable service system includes fiber optic cable for high speed internet and communications service.

There are no indications of service problems or constraints with the provisions of electric, gas, and communications services in East Windsor.

